



November 2013

Rhodophyllus Notebook 5

L. R. Hesler

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Rhodophyllum myceniformis (Murr.) comb. nov.

~~NOLANEA MYCENIFORMIS Murr.~~

Lloydia 9:326. 1946.

Nolanea myceniformis Murr.,

Illustration →

Pileus 1.3 cm broad, conic to campanulate, pale-avellaneous, umbo darker, glabrous, dry, margin even, entire or splitting. Context membranous, white, unchanging; odor none.

Lamellae sinuate, ^{white,} soon pink, broad, medium close.

Stipe 4 cm long, 1-2 mm thick, pale-melleous, glabrous, enlarged downward.

Spores 11-14 x 7-9 μ , 5-6-sided. Basidia 27-35 x 10-13 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 28-33 x 5.5-7 μ , cylindric, at times capitate, rare (absent in many sections). Subhymenium a very narrow zone of small cells. Gill trama subparallel. Pileus trama radial. Cuticle repent; no pilocystidia. Clamp connections none. Lactifers present in the pileus trama.

HABIT, HABITAT, AND DISTRIBUTION - In leaf-mold, in a low hammock, Florida, February.

MATERIAL STUDIED - FLORIDA: Murrill F38953, type, from near Gainesville, Feb. 23, 1945.

OBSERVATIONS - Murrill says it suggests a *Mycena* in shape and color, and has spores resembling those of *N. venosa* Bres. He gives the spores 9-11 x 5-6 μ , but in the type I found them larger.

RHODOPHYLLUS MYCENIFORMIS (Murr.) comb. nov.

Nolanea myceniforme Murr., Lloydia 9:326. 1946.

Pileus 1.3 cm broad, conic to campanulate, pale-avellaneous, umbo darker, glabrous, dry, margin even, entire or splitting. Context membranous, white, unchanging; odor none.

Lamellae sinuate, soon pink, broad, medium close.

Stipe 4 cm long, 1-2 mm thick, pale-melleous, glabrous, enlarged downward.

Spores 11-14 x 7-9 μ , 5-6-sided. Basidia 27-35 x 10-13 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 28-33 x 5.5-7 μ , cylindric, at times capitate, rare (absent in many sections). Subhymenium a very narrow zone of small cells. Gill trama subparallel. Pileus trama radial. Cuticle repent; no pileocystidia. Clamp connections none. Lactifers present in the pileus trama.

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Nolanea myceniformis Murr.
Type



Ch - x 1000 ⁽¹⁰³⁾

ENTOLOMA NIDOROSUM Fr.

Stow, Mass., leg. S. Davis, Sept. 13, 1911 (borrowed from Peck's collections, April 1966).

Spores 8.5-11 x 6-8 μ , 6(7)-sided, ellipsoid. Basidia 24-28 x 6-8 μ , 4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, slightly interwoven, a mediostrate, hyphae 4-7 μ broad. Subhymenium distinctly gelatinous. Pileus trama radial. Cuticle repent, radial.

This differs in several respects from E. nidorosum of Sweden (Lundell & Nannfeldt Co. 2009): in the Peck material (leg. Davis) the spores are larger (longer) and ellipsoid, the basidia smaller, the subhymenium conspicuously gelatinous, and the gills appear closer.

ENTOLOMA NIDOROSUM (Fr.) Quel.

Sweden, In Sphagnum-tussocks, in shady wood, Sept. 16, 1951, Lundell & Nannfeldt (Fungi Exsiccati Snecici Praesertim Upsaliensis No. 2009).

Spores 7-9 x 6-8 μ , subglobose to ovoid, 6-sided. Basidia 30-35 x 8-10 μ , 4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 3-6(9) μ broad. Subhymenium at times appearing subgelatinous. Pileus trama radial. Cuticle radial, repent. Lactifers and clamp connections none.

ENTOLOMA NIDOROSUM var. SOLIDIPIES Pk.

New York State Mus. Ann. Rept. 46:24. 1893.

Type

Spores 8-9 x 6-7 μ , 6-sided, subglobose or ovoid to short-ellipsoid. Basidia 21-27 x 7-8 μ , 4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 4-7 μ broad. Subhymenium not distinctive. Pileus trama radial. Cuticle radial; surface appears slightly gelatinous.

Peck says it differs from the type-variety in its adnate lamellae and solid stipe. For nidorosum, Fries says stipe is stuffed, and Bresadola says from stuffed to hollow.

X

★ ENTOLOMA NIGRICANS Pk.

Bull. Torrey Bot. Club 29:72. 1902.

Pileus 3-4 cm. broad, convex, becoming irregularly expanded and centrally depressed, dark gray or blackish, innately silky-fibrillose, shining, radiately cracked, margin somewhat striate or sulcate in dried specimens. Context thin; odor none.

Lamellae sinuate-adnate, seceding, salmon-colored, broad, subdistant, edges even.

Stipe 2.5-5 cm. x 4-8 mm., white streaked black, apex scurfy, silky-fibrillose, shining, solid then hollow, equal.

Spores (8.5) 10-11 x 7.5-8.5 μ , 5-6-sided, ellipsoid or ovoid. Basidia 32-38 x 6-8 μ , 2-4-spored, (~~material rather unsatisfactory for study~~). Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 5-9 μ broad. Pileus trama radial. Cuticle repent, with scattered or occasional small aggregations of nearly colorless to pale fuscous pilocystidia. Clamp connections and lactifers none.

Habit, habitat, and distribution. - On low ground, in woods, Missouri, 1900.

Material studied. - MISSOURI: Peck's type, collected by N. M. Glatfelter, St. Louis, Oct. 20, 1900.

Observations. - The description of microscopic characters above is based on a study of the type.

ENTOLOMA NIGRICANS Pk.

ex-herb. N.M. Glatfelter, No. 771, St. Louis, Mo., On low ground, wooded bottom, Oct. 20, 1900 (Peck herb.).

Type

Spores (9) 10-11 x 7-8.5 μ , ellipsoid to ovoid, 5-6-sided. Basidia 28-36 x 6-8 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 3-6 μ broad. Subhymenium slightly gelatinous ^{in some sections.} Pileus trama radial. Cuticle repent, with scattered, pale-brown, clavate pilocystidia. Clamps and lactifers none. *Gaulocystidia none as tufts of colorless hyphae which are rarely slender-clavate.*

ENTOLOMA NIGRICANS Pk.

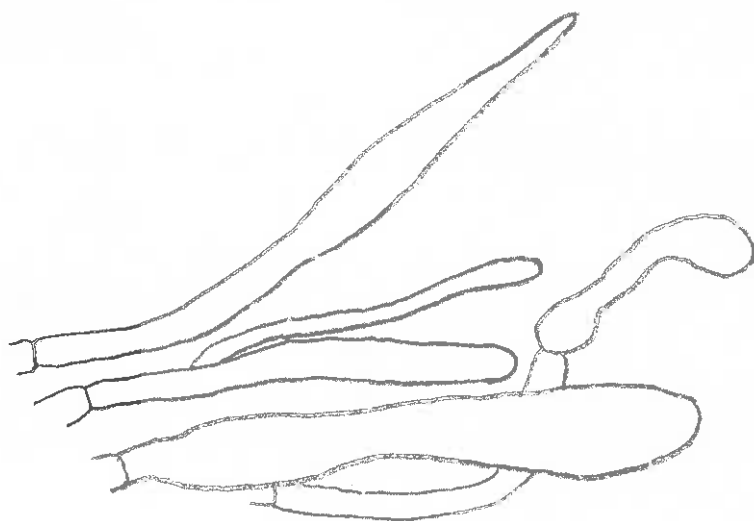
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Eutoloma nigricans Pk.

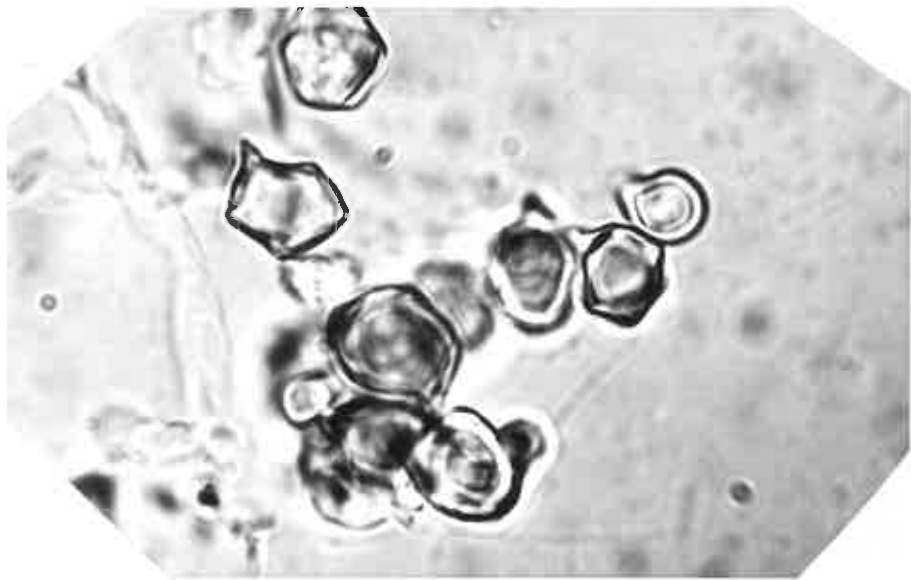
Type



Pilo - x 1000

(pale fuscous or
nearly colorless)

132



Entoloma nigricans PK. - Type

x

LEPTONIA NIGRA (Murr.) Murr.

Mycologia 9:180. 1917

Leptoniella nigra Murr., North Amer. Flora 10:94. 1917.

Pileus 3-4 cm broad, convex, not fully expanding, at times slightly umbilicate, black, glabrous, polished, margin sometimes lacerate-striate in age, incurved. Context rather firm.

Lamellae adnate, gray-murinous to salmon-colored, rather distant, broad, edges concolorous.

Stipe 4-6 cm x 4-6 mm, plumbeous, base whitish, cartilaginous, hollow, glabrous, equal or slightly tapering upward.

Spores 9-10 x 6-7 μ , 5-7-sided, often indistinctly 5-6-sided. Basidia 28-34 x 7-9 μ , 4-spored. Pleurocystidia none; cheilocystidia 32-54 x 4-11 μ , clustered, clavate to subcylindric. Subhymenium a narrow zone of small cells. Gill trama subparallel. Pileus trama of radial hyphae. Cuticle of repent hyphae with scattered or clustered (tufts) of pale-fuscous pilocystidia. Some of the epicuticular hyphae and pilocystidia are granulated. Lactifers none. Clamp connections present but rare on epicuticular hyphae of the pileus, but none at the primary septa of the pilocystidia, nor on the epicuticular nor cortical hyphae of the stipe.

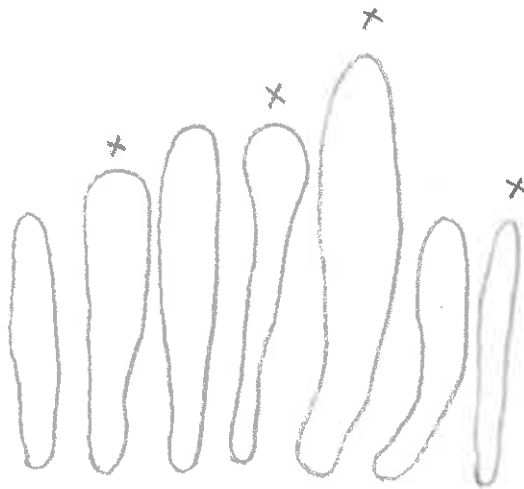
Habit, Habitat, and Distribution - On soil, among mosses, California, November.

Material Studied - CALIFORNIA: Murrill and Abrams 1257,

type, (NY), from near Palo Alto, Nov. 25, 1911.

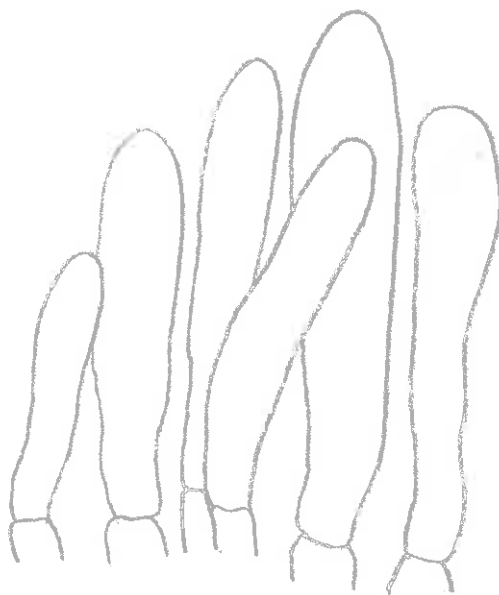
Observations - The description of microscopic characters above is based on a study of the type. Murrill gives the spores 12-14 x 7-9 μ —much larger than I found in the type.

Leptonia nigra (Moor.)
The type



Ch - $\times 1000$

(37)



(38)

Pilocystidia - $\times 1000$



Leptonia nigra Muer. - Type
x 2000

LEPTONIELLA NIGRA MURR.

Type

Coll. on soil, among moss, in mixed woods, near Palo Alto,
Nov. 25, 1911, Murrill & Abrams 1257.

Spores 9-10 x 6-7 μ , 5-7-sided, often indistinctly 5-6-sided. Basidia 28-34 x 7-9 μ , 4-spored. Pl. none; ch 32-54 x 4-11 μ , clustered, clavate to subcylindric. Subhymenium a narrow zone of small cells. Gill trama subparallel. Pileus trama of radial hyphae. Cuticle of repent hyphae, with scattered or clustered(tufts) of pale-fuscos pilocystidia. Some of the epicuticular hyphae and pilocystidia granulated. Lactifers none. Clamp connections present but rare on the epicuticular hyphae of the pileus, but none at the primary septa of the pilocystidia, nor on the epicuticular nor cortical hyphae of the stipe.

LEPTONIELLA NIGRA Murr.

(No collection data found)

(Not the type)

This collection, from N. Y. Bot. Garden, agrees with the type of L. nigra Murr., but there are no collection data with the specimens.

LEPTONIA NIGRICANS (Pk.) comb. nov.

Eccilia nigricans Pk., Torrey Bot. Club Bull. 22:201. 1895.

Pileus 1.5-3.5 cm broad, convex, umbilicate or centrally depressed, grayish-black, finely tomentose, subzonate, unpolished. Context thin; odor and taste of butternuts.

Lamellae decurrent, light-drab to brownish, becoming tinged flesh-color, broad, distant.

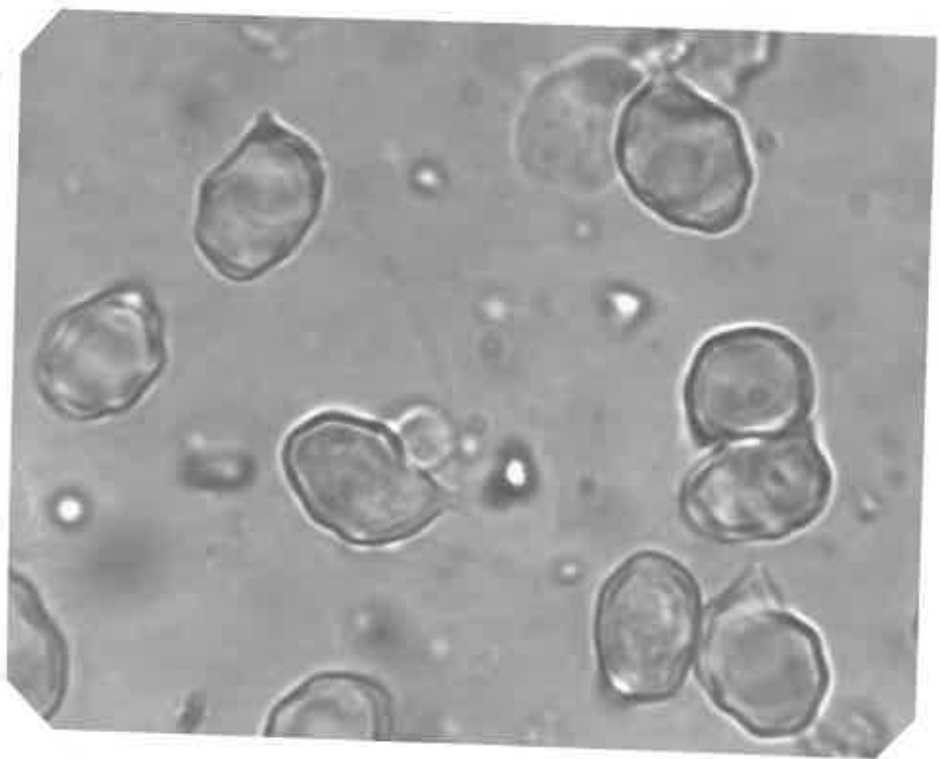
Stipe about 2.5 cm x 1-2 mm, grayish-black, usually with abundant white mycelium, hollow.

Spores (8) 9-11 x 6-8 μ , mostly 7-sided, a few 5-sided, at times obscurely 7-8-sided. Basidia 30-34 x 8-10 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel. Pileus trama radial. Cuticle repent, with some hyphae with their free ends more or less erect. Clamp connections and lactifers none.

Habit, Habitat, and Distribution - On grassy soil, California, January.

Material Studied - CALIFORNIA: Peck 825, type (NYS), collected by A. J. McClatchie, Pasadena, Jan 2, 1895.

Observations - The description of microscopic characters above is based on a study of the type. Sections of the pileus and gills were not entirely satisfactory for study, due, in part, to the probable fact that the specimens were beyond prime when collected.



Eccilia nigricans Pk. - Type

Pileus 2-4 cm broad, convex, finally slightly depressed, not umbonate, hygrophanous, dark-brown when wet, paler when dry, glabrous, margin striate. Context whitish; odor and taste farinaceous.

Lamellae adnexed, whitish then pinkish, rather close, medium broad, edges even, concolorous.

Stipe 2-4 cm long, 4-6 mm thick, dingy brownish, often compressed, equal above the slightly enlarged base, glabrous.

Spores 10-12 x 8-10 μ , subglobose to ellipsoid or ovoid, 5-6-sided. Basidia 32-43 x 8-12 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 7-12 μ broad. Pileus trama radial. Cuticle repent; no pilocystidia. Clamp connections and lactifers none.

Cf. Ent. turbidum Fr. which has a long, whitish stipe, and spores 8-9 x 6-8 μ ; and Ent. costatus Fr. which has spores 7-8 x 6.5-7 μ . E. modestum has larger spores, subdistant gills, colorless pilocystidia and clamps (rare). E. fumosonigrum has disagreeable taste, spores 7.5-9 x 6-7.5 μ ; and with fuscous pilocystidia, E. nigricans has no odor, subdistant gills, spores (8.5) 10-11 x 7.5-8.5 μ , ellipsoid or ovoid, fuscous pilocystidia. In E. subcostatum the pileus and stipe are larger, gills veined. E. murinum is gray-brown, silky, odor-taste (?), stipe white, spores 10-12 x 7-8.5 μ .

Pileus 28-34 mm broad, convex-plane, hygrophanous, gray-brown, disc black, silky, margin even. Context thin, grayish; odor mild, taste grassy or of cucumbers, faintly farinaceous.

Lamellae rounded-adnate, broad, ventricose, close, grayish-white, then flesh-color, edges even.

Stipe 4-7 cm long, 4-5 mm thick, gray-brown, apex paler, equal, hollow, easily splitting.

Spores 9-11 x 7-9 μ , 5-sided, at times obscurely so, color in mass: "cacao brown." Basidia 39-44 x 12-14 (16) μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 8-15 μ broad. Pileus trama radial. Cuticle repent, with some colorless, surface hyphae more or less uplifted, the terminal elements cylindric-clavate and cystidioid. Clamps none. Lactifers in pileus trama.

When dried, the pileus seems too pale for sericeum; material from Sweden is dark-brown!

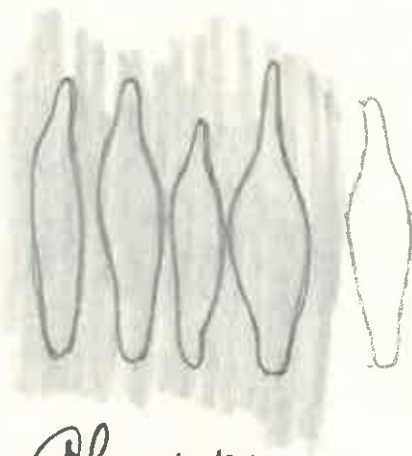
Nolanea No. 9027

nigrodisca - Type

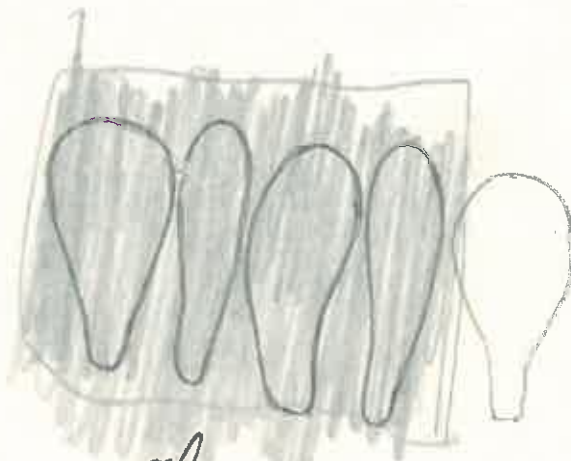


Pilo - X 1000

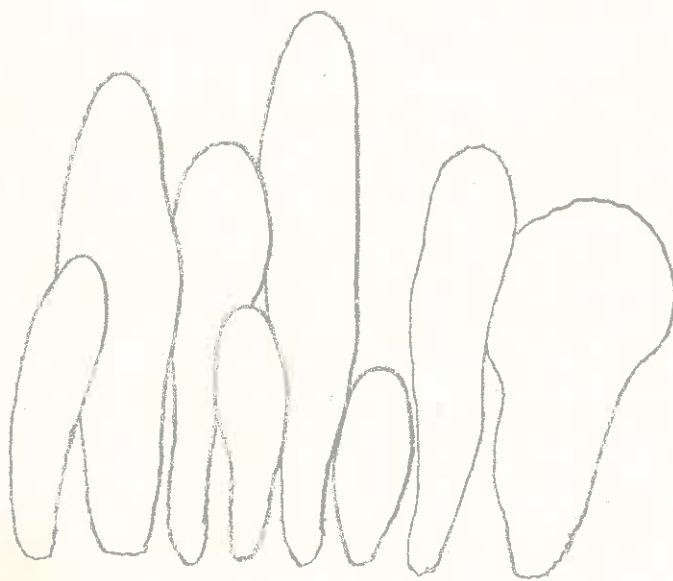
Leptonia No. 25724
nigrosquamata sp. nov.
Fyfe



Pl. - x 1000



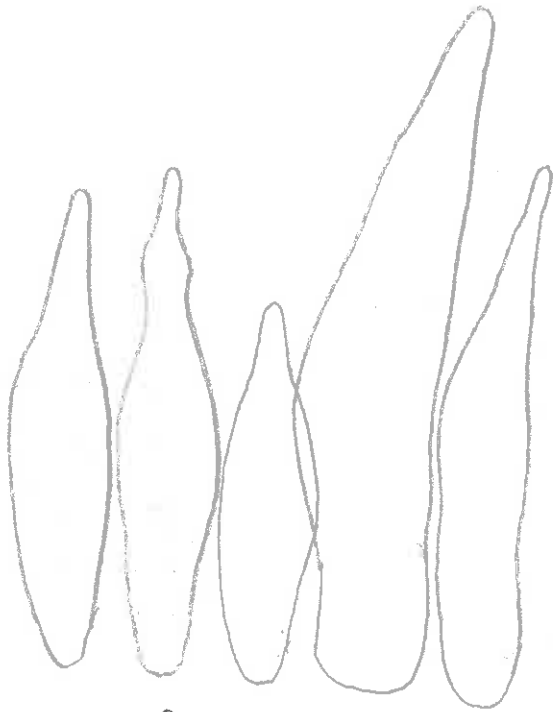
Ch. - x 1000



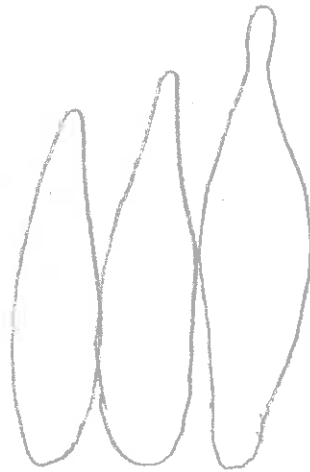
Pilo(fuscous) - x 1000

Rhodophyllus nigrosquamosus

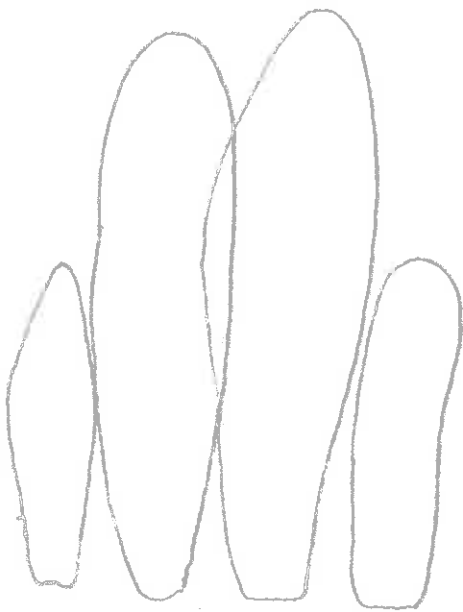
Term - 29192



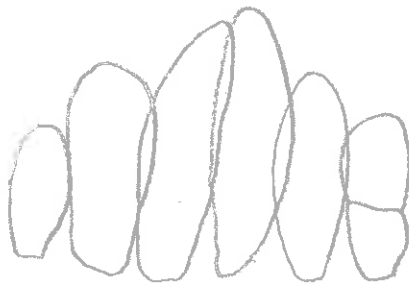
Pl. x 1000



ch. x 1000



Pilo - x 1000



Caulo - x 1000

LEPTONIA NIGROVIOLACEA Orton

Type (from Edinburgh)

Orton No. 1270, type (portion if it), from Royal Bot. Garden, Edinburgh, Aug. 27, 1955.

Spores (10) 11-12.5 x 6.5-8 (8.5) μ , (5) 6 (7)-sided. Basidia 33-41 x 9-11 μ , 4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 4-11 μ broad. Pileus trama radial. Cuticle repent hyphae, bearing clavate, fuscous pilocystidia. Clamp connections none.

Part of type is at Kew; see my notes on that collection, also.

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LEPTONIA NIGROVIOLACEA Orton

Trans. Brit. Myc. Soc. 43(2):296. 1960

Type

from Kew, coll. Tomich, Inverness-shire, Aug. 27,
1955 (date on label), No. 1270.

Spores (9) 10-12 x 6.5-8 μ , 6-sided. Basidia
33-48 x 8-11 μ , 4-spored. Pleurocystidia and cheilocystidia
none. Gill trama subparallel, hyphae 4-10 μ broad. Pileus
trama radial. Cuticle of brownish, repent hyphae, bearing
some colorless hyphae and fuscous, clavate pilocystidia,
8-12 μ broad. Clamp connections none.

Part of the Type is also at Edinburgh; see my
notes on that, also.

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trama radial. Cuticle of brownish, repent hyphae, bearing
some colorless hyphae and fuscous, clavate pilocystidia,
8-12 μ broad. Clamp connections none.

LEPTONIA NIGROVIOLACEA Orton

from Kew ; on lawn, under beech trees, Invercauld
Estate Office, Braemar, Scotland, Aug. 24, 1961, coll. by
K. v. W., identification by Orton.

This agrees with the Type.

LEPTONIA NIGROVIOLACEA Orton

from Kew ; on lawn, under beech trees, Invercauld
Estate Office, Braemar, Scotland, Aug. 24, 1961, coll. by
K. v. W., identification by Orton.

This agrees with the Type.

10742

LEPTONIA NIGROVIOLACEA Orton

Pileus 1-3.5 cm broad, depressed, blue-black then fuscous, squamulose on disk, glabrous elsewhere, even. Context blue-black, pallid in mature and older specimens; odor and taste mild.

Lamellae adnate-seceding, white then pinkish, ventricose, broad, subdistant, edges concolorous.

Stipe 2-4 cm x 1-3 mm, blue-black then fuscous, glabrous, base white-mycelioid.

Spores 10-13 x 6-7 (8) μ , variable, 5-7-sided, at times indistinctly 5- or 6-sided. Basidia 28-34 x 8-10 μ , 4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel. Pileus trama radial (as pseudoparenchyma in tangential sections). Cuticle repent; on the disc, erect tufts of fuscous, clavate or cylindric pilocystidia. Clamp connections none; lactifers present in the gill and pileus trama. Gill trama mounts not milky.

12242

LEPTONIA NIGROVIOLACEA Orton

Pileus 10-14 mm broad, convex, umbilicate-depressed, blackish, glabrous except for some scales on the disk, margin even.

Lamellae adnate, whitish then flesh-pink, edges concolorous, broad, moderately close.

Stipe 4-6 cm x 1-2 mm, apex dark, becoming paler downward, slightly enlarged toward the base, becoming glabrous.

Spores 10-13 x 6-8 μ , 5-6-sided, symmetrical. Basidia 31-37 x 7-10 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel. Pileus trama radial. Cuticle repent, with many tufts of cylindrical, fuscous pilocystidia (the scales). Mounts not milky.

Leptonia nigroviolacea var. *nigroviolacea*
~~*cornuta* (Kühner)~~
No. 12242



Pleurophidia - x 1000

Pileus 18-20 cm broad, convex, obsoletely umbonate, not umbilicate nor depressed or slightly so, ground color "dusky violet-blue(2)," densely covered with blackish squamules (more abundant on disk), margin at first even. Context thin, pale bluish; odor and taste mild.

Lamellae emarginate-uncinate, white at first, then "pale pinkish buff," close, ventricose, broad, edges concolorous and even or slightly fimbriate.

Stipe 7-8 cm x 1.8-2 mm., "dark plumbeous," squamulose, squamules blackish and more dense at apex, base white-mycelioid, tubular-stuffed.

Spores 10-13 x 6-9 μ , 6-7-sided, often more or less indistinctly so, "pale pinkish buff" in deposits. Basidia 32-43 x 10-12 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Subhymenium not differentiated or at most a very narrow zone of small cells. Gill trama subparallel, hyphae 4-10 μ broad. Pileus trama radial. Cuticle of pileus with extended clusters, or tufts of pale fuscous pilocystidia. Cuticle of stipe with more or less turf or tufts of colorless caulocystidia which are cylindric, clavate, at times more or less constricted. Clamp connections and lactifers none. Mounts not milky.

Habit, Habitat, and Distribution - On fallen chestnut bark, Indian Creek, GSMNP, July 21, 1946.

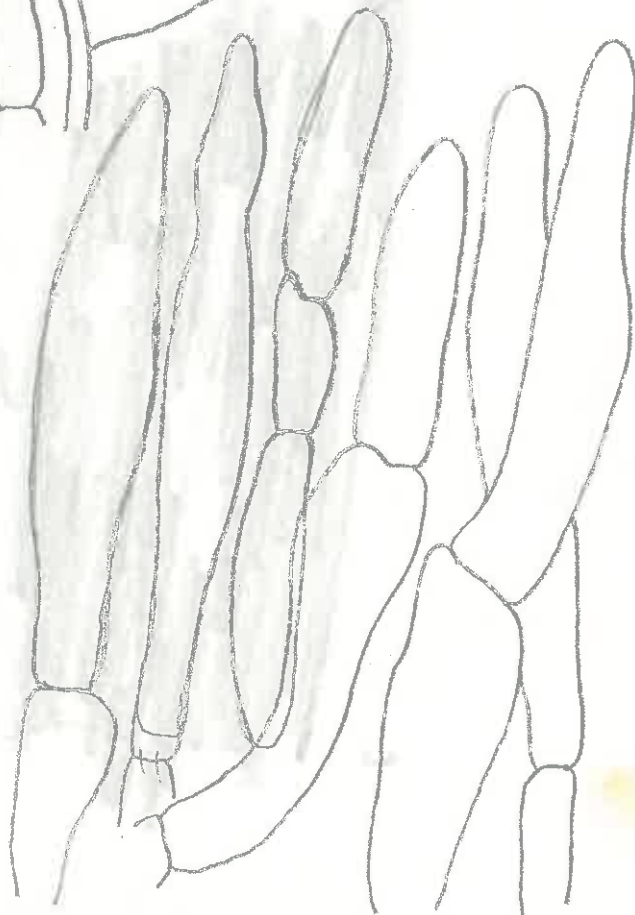
The collection (No. 17659) was sent to Smith who says:
"Leptonia lappula Fr. sensu Kauff. Cap of Friesian species
supposed to be gray. Kauffman got specimens like yours at
Chain Bridge, Va., and labelled them L. lappa var. I personally
think it a var. of L. lampropa with a squamulose stipe."

Sections of the cap become blue-green in 2% KOH (best
seen with the unaided eye).

Septoria nigroviolacea G. S. var. *nigroviolacea*
~~*Lappula* *canu* Kauff.~~
No. 17659 (~~a var. of *Lappula*~~)



~~St~~ *Caulocystidia* -
(x 1000)



Cuticle (scale) - x 1000
(*Pilocystidia*)

22029

LEPTONIA NIGROVIOLACEA Orton

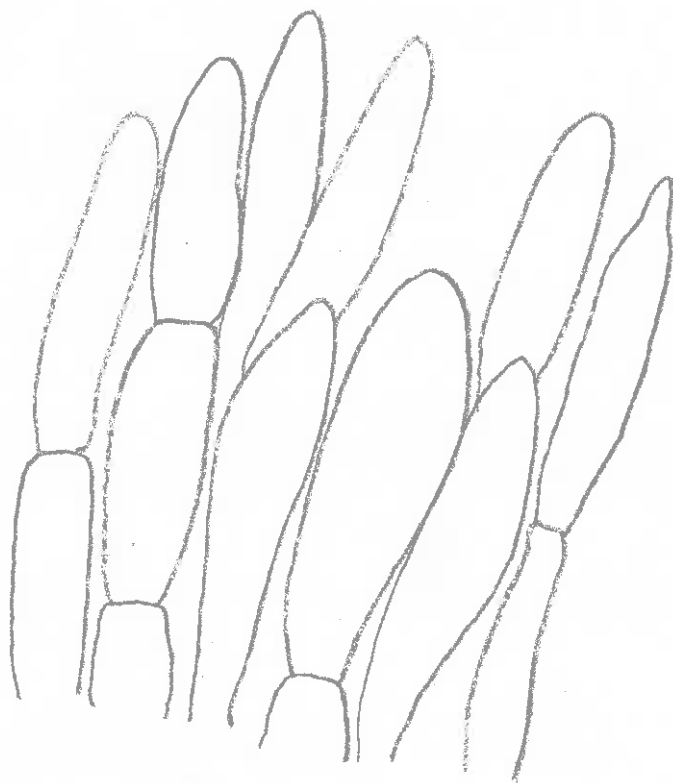
Pileus 18-20 mm, convex, disk depressed, fibrillose-scaly all over, dry, not hygrophanous, "dark plumbago slate," (dark violaceous), fading little or none, margin even. Context "pale bluish-lavender", thin, fragile; odor none, taste farinaceous-astringent.

Lamellae emarginate to adnexed, or adnate, seceding, white or whitish then dingy cream, finally very pale flesh, nearly subdistant, broad, edges concolor, slightly fimbriate.

Stipe 5-7 cm x 2-3 mm, concolor to pileus and scaly throughout, base white-mycelioid, hollow, tapering upward, dry.

Spores 10-12 x 6-7.5 μ , sharp-angled, 6-7-sided. Basidia 33-43 x 10-12 μ , 2- or mostly 4-spored. Pleurocystidia and cheilocystidia none. Subhymenium a narrow zone of small cells. Gill trama subparallel, hyphae 6-12 μ broad. Pileus trama radial. Cuticle repent, with numerous fibrillose scales composed of tufts of pilocystidia which are almost colorless or pale fuscous. Clamps and lactifers none.

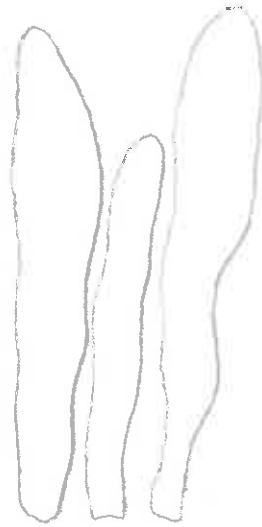
nigroviolacea Orton var.
Leptonia lampyrops (Fr.) Quel. *nigroviolacea*
No. 22029



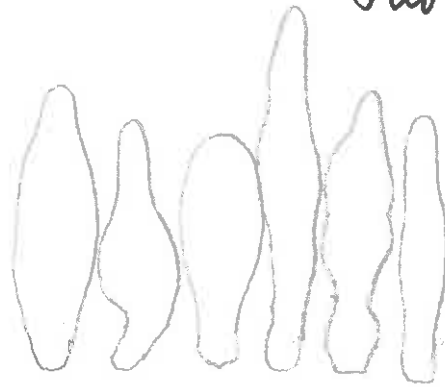
Plasmodium - x 1000

Leptonia nigroviolacea var. *nigroviolacea*

Tenn - 22029



Pilo - $\times 1000$



Caulo - $\times 1000$

nigroviolacea!
a
LEPTONIA ~~LAMPROPS~~ Fr.

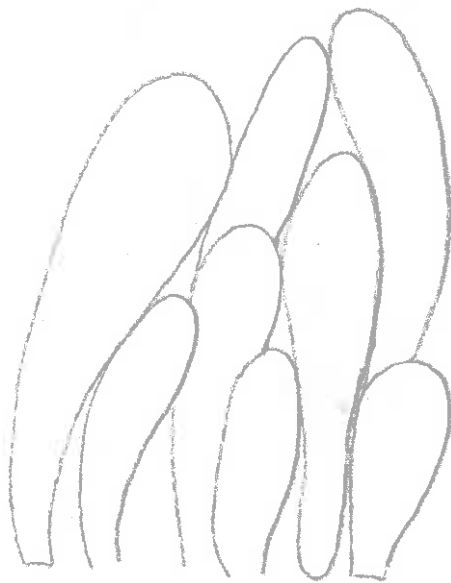
Collection from Mus. Botan., Stockholm, Uppland, Oct. 1888.

H. Kugelberg.

Spores 10-14 x 7-8 μ , 5-6-sided, at times obscurely so, symmetrical. Basidia 31-37 x 10-13 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Subhymenium a narrow zone of small cells. Gill trama parallel to subparallel, hyphae 6-12 μ broad. Pileus trama radial. Cuticle repent, with scattered tufts of fuscous, clavate pilocystidia. Clamp connections none at the base of the basidia nor on the cuticular elements.

Leptonia lamproa Fr. *nigronolacea* ?
Stockholm Coll.

Uppland, Oct. 1888. H. Kugelberg.



Pileceptidia - x 1000

26249

LEPTONIA NIGROVIOLACEA Orton var. NIGROVIOLACEA

Bas-8031, Prov. Gelderland, Netherlands, coll. Sept. 30, 1951,

R. A. Maas Geesteranus (det. as Sampropa)

Spores 9-12 x 6-7.5 μ , 6-7-8-sided, at times nodulose.
Pleurocystidia and cheilocystidia none. Pilocystidia clavate,
fuscous, often in tufts.

29236

RHODOPHYLLUS NIGROVIOLACEUS
var. NIGROVIOLACEUS

Coweeta Lab, leg. Petersen, Aug. 11, 1966

Pileus blue-black, scaly, context and stipe blue-black,
lamellae white. Odor mild, taste slight.

Spores 10-12 x 6-7 μ . Pleurocystidia and cheilocystidia
none. Pilocystidia fuscous, clavate, in tufts.

nigrovioleacea var. *striatula* var. nov.

24858

LEPTONIA ~~CORVINA~~ var. ~~STRIATULA~~ var. nov.

Photo

Pileus 12-20 mm., hemispheric-convex, expanding-convex, hygrophanous, at first "dark Quaker drab", somewhat paler at maturity, minutely scaly throughout but finally only on disc, innately fibrillose, atomate, margin striate to disc. Context pale bluish-gray when dry, darker bluish when wet, thin; odor none, taste fungoid.

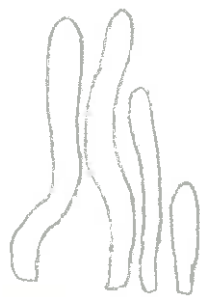
Lamellae sub-sinuate, white, finally with a flesh-tint, close, rather broad, edges concolorous.

Stipe 3-4.5 cm. x 1.5-2 mm., at first "neutral gray", finally paler ("light neutral gray"), base white-mycelioid, apex slightly white-pruinose, elsewhere glabrous, equal, hollow.

Spores 9.5-11 (12) x 6-7.5 μ , 5(-6)-sided. Basidia 30-36 x 8-9 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 5-9 μ broad. Pileus trama radial. Cuticle repent, with scattered to numerous more or less clustered, pale fuscous pilocystidia. Clamps and lactifers none.

Leptonia 24858

~~*Leptonia*~~ var. *striatula* var. nov.
L. nigroviolacea ✓



Caulo - X 1000



Pilo - X 1000



24858

24858- *R. nigroviolaceus* var. *striatulus*

24858 - *Reptonia* ^{*nigroviolacea*} ~~*corina*~~ var. *striatula* var. *nov.*



24858 - *Leptoma nigroviolacea* var. *striatula* var. nov.

30184 ENTOLOMA NIGROVIOLACEUM VAR. STRIATULUM Hes.

Cades Cove, leg. Petersen, July 26, 1968.

Cap dingy blue black (faded?), depressed, scaly on disc,
margin striate. Taste distinctly fungoid, leaving bitterish
after-taste.

Stipe slate-bluish.

24315

ENTOLOMA NITIDUM Quél.

Entoloma ardosiacum (Fr.) Quél., *Asin. Fr. Aranc. Sc.* 11:6. 1882.
Rhodophyllus nitidus (Fr.) Quél.

(from Lange)

Pileus 2.5-5.5 cm. broad, somewhat conic, then expanded, with an obtuse or somewhat acute umbo, dark indigo-violaceous, with a silky lustre, fading to fuscous-violaceous.

Lamellae white then pinkish, broad, medium close.

Stipe 4-6 cm. x 4-8 mm., more or less concolorous, base rooting and whitish, slightly fusiform.

Notes by Hesler

Spores 8-10 x 6-8 μ , globose, subglobose, to ovoid, indistinctly 5-6-sided. Basidia 28-37 x 7-9 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama of subparallel hyphae, hyphae 10-27 μ broad, relatively short (30-75 μ). Pileus trama radial. Cuticle of repent, narrow (3-7 μ) broad hyphae, slightly gelatinous, the subcuticular hyphae very broad (18-35 μ) hyphae. Lactifers in the pileus trama, 7-12 μ broad, irregular; clamp connections none.

Observations. - The description of macroscopic characters is adapted from Lange; microscopic characters based on a study of No. 24315, collected by Moser & Hesler, near Innsbruck, Austria, Sept. 14, 1960. See my notes on comparison with E. madidum.



Entoloma nitidum Qué1 (U-T No. 24315)

LEPTONIA NIVEA (Pk.) comb. nov.

Eccilia nivea Pk., New York State Museum Ann. Rept. 49(1895):32.
1897.

Pileus 8-12 mm broad, hemispheric to ~~very~~ convex, slightly umbilicate, white, finely appressed-fibrillose (Murrill), glabrous (Peck). Context thin, submembraneous.

Lamellae decurrent, arcuate, white, becoming pinkish, distant, medium broad.

Stipe 2-5 cm x 1-2 mm, white, glabrous, fragile, hollow.

Spores 10-12 x 7-8 μ , 6-7-sided, at times obscurely so. Basidia 28-34 x 10-12 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel. Pileus trama radial. Cuticle repent, the colorless surface hyphae often loosened and more or less uplifted, the terminal elements as cylindric to clavate pilocystidia. Clamp connections and lactifers none.

Habit, Habitat, and Distribution - On damp ground in thin woods, New York, September.

Material Studied - NEW YORK: Peck, type (NYS), Selkirk, September.

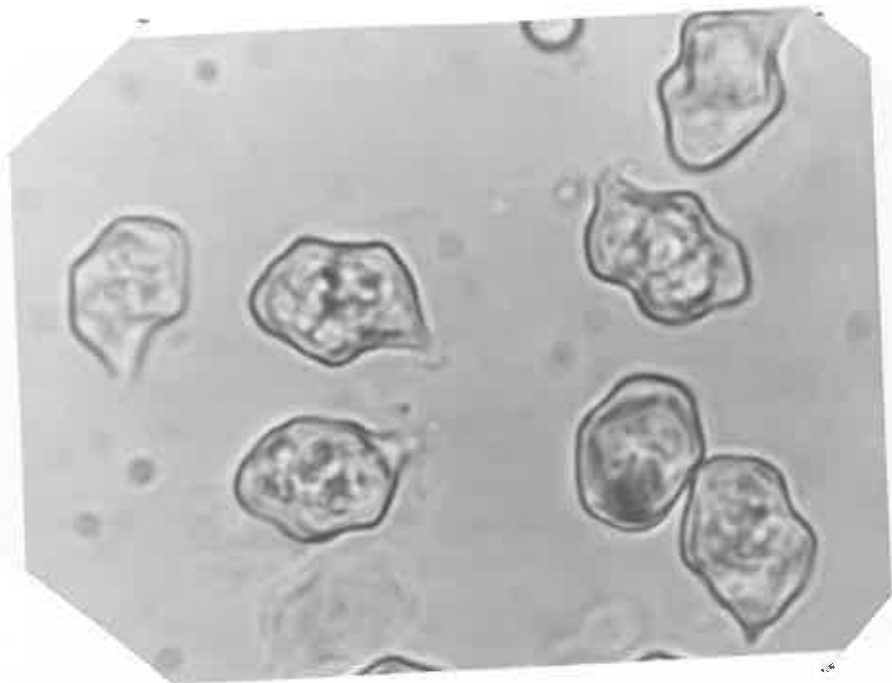
Observations - The description of microscopic characters above is based on a study of the type. Peck originally described the spores 7.5 μ long and nearly as broad, but I found the spores of the type larger than Peck reports. Despite Peck's statement

that the pileus is glabrous, the type showed both uplifted hyphae and pilocystidia. The decurrent gills separate it from L. albinella.

Escilia nivea PK. - Type

x 1680

Photo by T. H. Campbell



Escilia nivea PK. - Type

x 2565

Photo by T. H. Campbell

Leptonia (Eccilia) nireca
Type



Pilocyptidia - x 1000

+

NOLANEA NODOSPORA Atk. = *dyothaler*

Jour. Myc. 8:114. 1902

Pileus 1-1.5 cm. broad, campanulate, dark brown, very squarrose scaly. Context brown.

Lamellae ascending, becoming adnate, concolorous, rather close, broad.

Stipe 6-7 cm. x 1.5-2.5 mm., concolorous below, paler above, very hairy, becoming fistulose, slightly enlarged at the base.

Spores 10-16 x 7-9 μ , more or less wavy-nodulose, nodulose-angular, distinctly 6-9-sided, ~~symmetrical~~, flesh-color in deposits. Basidia 35-42 x 9-11 μ , 4-spored. Pleurocystidia none; cheilocystidia 46-55 x 8-10 μ , fusoid, clavate, obclavate, at times appendiculate, absent in many sections. Gill trama undulating-subparallel. Pileus trama radial. ~~(as pseudoparenchyma in tangential sections)~~. Cuticle repent, with numerous, long bundles of brown, granulate hyphae, usually of two types: (1) broad, 10-12 μ ; (2) narrow, 3-5 μ . The terminal elements are regarded as pilocystidia. Clamp connections none. Lactifers few in ^{the} gill trama.

The type: No. 13431, on soil, Six Mile Creek, Ithaca, N.Y., coll. R. R. Gates, Aug. 8, 1902, det. Atkinson.

Three other collections from Ithaca, on the sheet resemble the type: No. 22164, Cascadilla Woods, Oct. 3, 1907; No. 13596, McGowan's Woods, Aug. 19, 1902; No. 13487, Enfield Gorge, Aug. 12, 1902.

Here and there in the hymenium are brown clavate bodies

which suggest pleurocystidia, but ^{these} ~~after some search these~~
proved to be basidia (with four sterigmata).

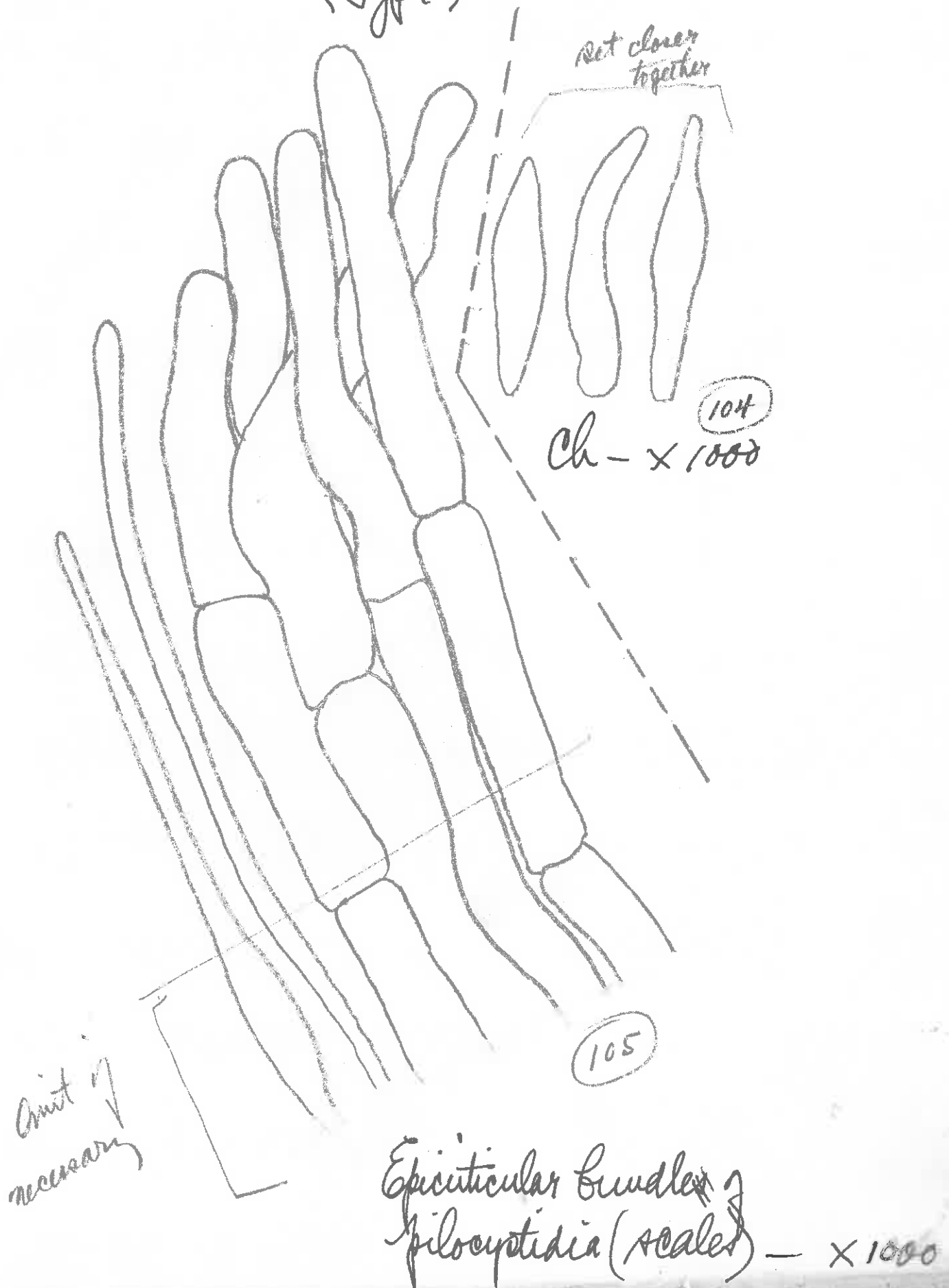
The "woolly" stipe bears the slender hyphae, similar to those on the pileus.

In some of Atkinson's collections the pileus is larger. ~~This~~

This species is the same as N. ~~dysthalis~~
dysthalis, + nodospora becomes a synonym.

Nolanea nodospora Att.

(Type)



29211

RHODOPHYLLUS OBSCURUS sp. nov.

TYPE

Cades Cove, July 20, 1966

Pileus 1-2 cm broad, umbilicate, disc blackish, grayish with olivaceous scales and fibrils, substriate. Context whitish; odor and taste slightly farinaceous.

Lamellae adnexed, close or subdistant, broad, at first white, edges concolorous.

Stipe 3-6.5 cm long, 0.7-1.5 mm thick, "cinereous" (blue-gray), apex paler and minutely white-pruinose, solid.

Spores 7.5 - 10 x 6-7 μ , 5-6-sided. Pleurocystidia none; cheilocystidia 30-53 x 10-17 μ , clavate, colorless or obscurely fuscous. Gill trama subparallel. Subhymenium not distinctive. Pileus trama radial. Cuticle bearing tufts of fuscous, clavate pilocystidia, 52-88 x 10-21 μ . Caulocystidia in tufts, 25-32 x 7-9 μ , colorless, clavate. The mount is granulate-milky.

This is distinguished by its gray-brown pileus with olivaceous scales, large (broad), clavate cheilocystidia, and medium sized spores.

Near R. corvinus which has spores 8.5-12.2 x 6.5-7.2 μ , and stipe finally nearly white.

29171

RHODOPHYLLUS OBSCURUS

PHOTO

On soil, Smokemont, leg. Petersen, Aug. 12, 1966

Pileus 1-3.5 cm broad, ^{umbilicate-depressed} conic-campanulate, more or less expanding, "wood brown," margin paler and striate to disc, disc dark ^{and} olivaceous squamulose. Context pallid or dingy; odor and taste subfarinaceous.

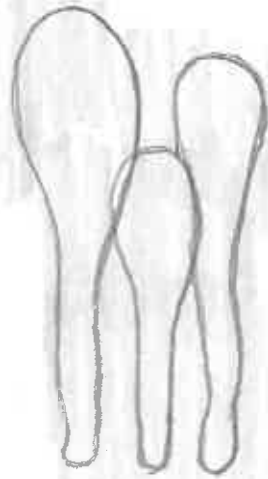
Lamellae narrowly attached, white then pink, broad, close, edges concolorous.

Stipe 3-6 cm long, 1-2.5 mm thick, ^{"light"} mouse gray to ^{"near"} ~~black~~ ^{amercous,} apex white pruinose, tubular.

Spores 8.5-10(11) x 6-7 μ , 5-6-sided. Pleurocystidia none; cheilocystidia 38-60 x 10-17 μ , clavate, subcapitate. Gill trama subparallel, hyphae 6-10 μ broad. Subhymenium not distinctive. Pileus trama radial. Pilocystidia and caulocystidia similar to cheilocystidia.

Rhodophyllus obscurus

No. 29171



Ch - x 1000

LEPTONIA OCCIDENTALIS (Murr.) Murr.

Mycologia 9:180. 1917

Leptoniella occidentalis Murr., North Amer. Flora 10:93. 1917.

Pileus 2-3 cm broad, convex to plane, not umbonate, uniformly very dark steel-blue-violet or lilac-black, finely scabrous or fibrillose, margin not striate. Context exceedingly thin.

Lamellae adnexed with a slight decurrent tooth, white to lilac or salmon-colored, rather broad, ventricose, distant, several times inserted, edges entire.

Stipe 4-5 cm x 2-3 mm, concolorous, glabrous, base white-mycelioid, equal, cartilaginous.

Spores 9.5-12 x 6.5-8 μ , 7-sided, many irregularly or indistinctly 8-9-sided. Basidia 32-41 x 8-12 μ , 4-spored. Pleurocystidia and cheilocystidia none. Subhymenium a narrow zone of small cells. Gill trama subparallel. Pileus trama radial. Cuticle repent, with more or less erect, numerous, fuscous, septate pilocystidia. Clamp connections and lactifers none.

Habit, Habitat, and Distribution - On soil, among humus, under fir in mixed woods, Oregon and California, November.

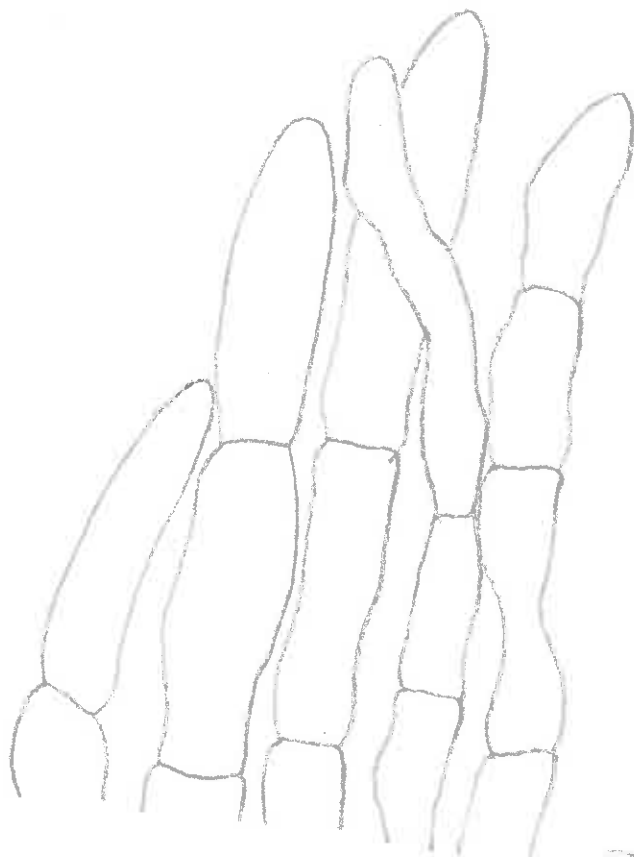
Material Studied - OREGON: Murrill 978, type (NY), from Corvallis, Nov. 6-11, 1911.

Observations - The description of the microscopic characters is based on a study of the type. This is apparently related to L. australis and L. violaceo-brunnea, both of which has colorless pilocystidia, and spores 5-6-sided.

Nolanea

~~Leptonia~~ *occidentalis* (Murr.)

Type of *Leptonia occidentalis*



Cuticle - X 1000

40

✕

✕ NOLANEA OCCIDENTALIS Murr.

N. A. Flora 10:101. 1917

Pileus 3 cm. broad, convex to plane, with a small rounded umbo, hygrophanous, glabrous, sordid-avellaneous, striate. Context very thin; odor none.

Lamellae sinuate, nearly free, dull-whitish then salmon-colored, distant, broad, ventricose.

Stipe 6 cm. x 3 mm., avellaneous, subequal, hollow, snapping readily.

Spores 9-11 x 7.5 -8.5 μ , subglobose, 5-6-sided, the angles and sides often obscure, at times difficult to distinguish.

~~symmetrical~~ Basidia 27-32 x 8-11 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. ~~Subhymenium obscure.~~ Gill trama sub-parallel, hyphae 6-12 μ broad. Pileus trama radial. Cuticle repent. *Pileocystidia*, clamp connections, and lactifers none.

^
Habit, habitat, and distribution. - On soil, in woods, Washington, October-November.

Material studied. - WASHINGTON: Murrill, 342, the type; and Nos. 327, 409, and 643, - all from Seattle, Oct. 20-Nov. 1, 1911.

Observations. - The microscopic characters above are based on a study of the type. The spores are striking and distinctive (subglobose, often faintly angular, and never strongly angular as in most *Rhodophyllus*; they remind one of those of *L. grisea* Pk.)

ochraceus

RHODOPHYLLUS ~~CINNAMOMEUS~~ sp. nov.

Pileus 4-8 mm broad, hemispheric-campanulate, papillate-umbonate, slightly expanding, "ochraceous buff" to "cinnamon buff," silky, striate to disc. Context thin, concolorous.

Lamellae narrowly attached, at first pinkish buff, medium broad, nearly subdistant.

Stipe 2-3 cm long, 1-1.5 mm thick, concolorous, white-pruinose above, equal.

Spores quadrate, (7.5)9-12 x (7.5)9-11 μ . Basidia 40-45 x 10-12 μ , 4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 4-8 μ broad. Subhymenium not distinctive. Pileus trama radial. Cuticle bearing colorless, uplifted hyphae, the terminal elements as clavate pilocystidia. Caulocystidia more or less in tufts, slender-clavate, similar to pilocystidia. Clamp connections present.

HABIT, HABITAT, AND DISTRIBUTION - On soil, South Carolina, September.

MATERIAL STUDIED - SOUTH CAROLINA: Lyles, type, (TENN-29444), September 17, 1966.

OBSERVATIONS - This seems related to R. subquadratus, in which the pileus is "avellaneous," and subzonate, the context white, the stipe drab or olive-brown, and the spores smaller than in R. ~~cinnamomeus~~ ^{ochraceus}. It suggests R. conicus, in which the spores are 5-sided. It is also somewhat related to R. spadix,

R. cinnamomeus - 2

oskarens

in which the pileus is dark-brown, not papillate, scaly,
context whitish, lamellae at first white, the pilocystidia
fuscous.

29444

ochraceus
RHODOPHYLLUS CINNAMOMEUS sp. nov.

TYPE

On soil, Winnsboro, S. C., leg. Carolyn
Lyles (No. 104), Sept. 1966

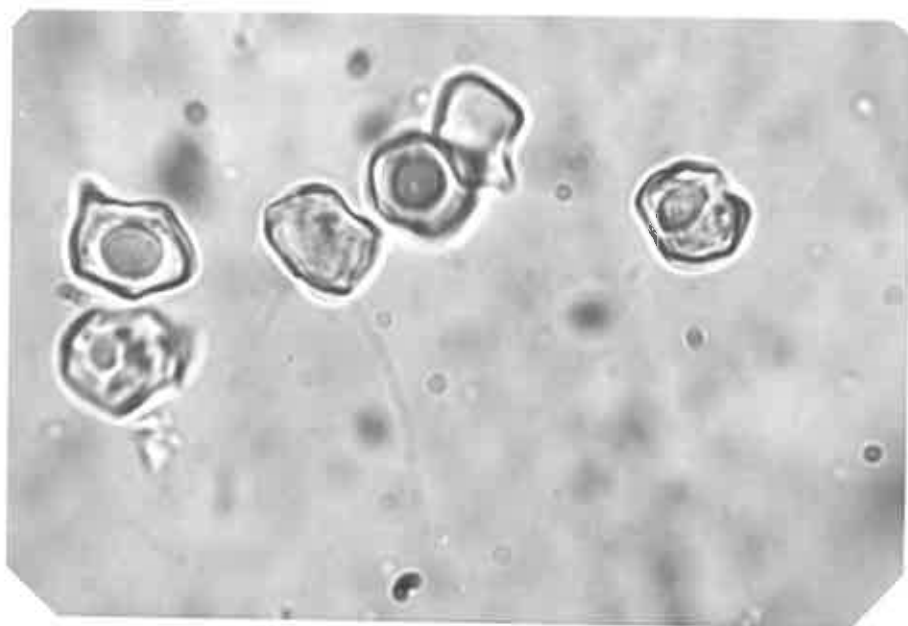
↑ 17,
Pileus 4-8 mm broad, hemispheric-campanulate, papillate-umbonate, slightly expanding, "ochraceous buff" to "cinnamon buff," silky, striate to disc. Context thin, concolorous.

Lamellae narrowly attached, at first pinkish buff, medium broad, nearly subdistant.

Stipe 2-3 cm long, 1-1.5 mm thick, concolorous, white-pruinose above, equal.

Spores quadrate, (7.5)9-12 x (7.5)9-11 μ . Basidia 40-45 x 10-12 μ , 4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 4-8 μ broad. Subhymenium not distinctive. Pileus trama radial. Cuticle bearing colorless, uplifted hyphae, the terminal elements as clavate pilocystidia. Caulocystidia more or less in tufts, slender-clavate, similar to pilocystidia. Clamp connections present.

—
This seems related to R. subquadratus, in which the pileus is "avellaneous," and subzonate, the context white, the stipe drab or olive-brown, and the spores smaller than in R. cinnamomeus No. 29444. It suggests R. conicus, in which the spores are 5-sided. It is also somewhat related to R. spadix, in which the pileus is dark-brown, not papillate, scaly, context whitish, lamellae at first white, the pilocystidia fuscous.



Leptonia No. 12709

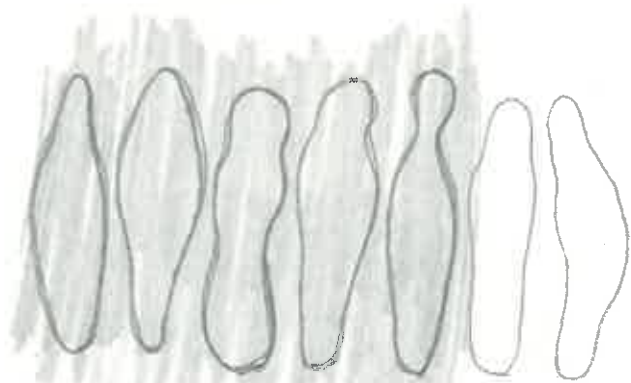
= *R. odorifera* Af. nov.



Leptonia No. 12709

odorifer

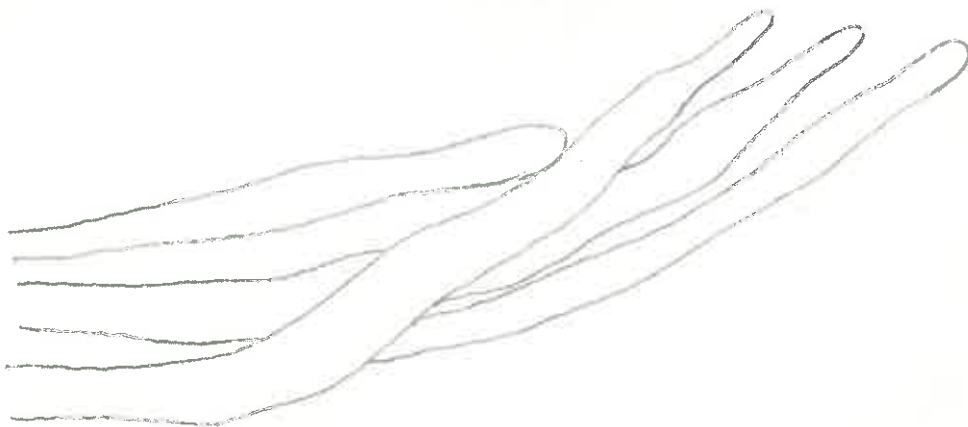
Leptonia odorifera sp. nov.
No. 12709



Pl - x 1000



Ch - x 1000



Cuticle - x 1000



Leptonia No. 12709

= R. odoriferum sp. nov.

NOLANEA OLIVACEA Murr.

North Amer.

N. A. Flora 10:98. 1917

Pileus 7 mm/ broad, conic to campanulate, disc dark-olivaceous, paler olivaceous toward the margin, conspicuously fibrillose, margin striate and appressed to the stipe. Context thin.

Lamellae adnexed, salmon-colored, rather broad, subdistant, edges concolorous.

Stipe 2 cm/ ^{long,} 1 mm/ ^{thick,}, pale olivaceous, fibrillose like the pileus, equal.

Spores 13-17 x 7-8 μ , angular, often more or less nodulose, 8-9-sided, ~~symmetrical~~. Basidia 34-40 x 10-13 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 32-40 x ^{4.5} 8-10 μ , ~~2-4-spored~~. ~~Pleurocystidia none; cheilocystidia 32-43 x 8-10 μ , bottle-shaped to subcylindric, more or less appendiculate, few. Gill trama subparallel. Pileus trama radial. Cuticle repent, with numerous surface hyphae~~ ^{which are} more or less erect, the terminal element long, 5-15 μ broad, cylindric, clavate, at times more or less constricted, fuscous, slightly granulate_x - pilocystidia.

Habit, habitat, and distribution_x - On soil, in woods, Tennessee, ~~August~~ ^{August}.

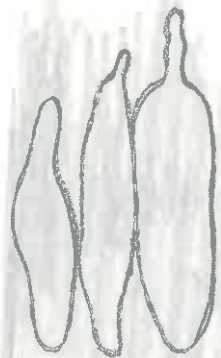
Material studied_x - TENNESSEE: Murrill 861, ~~the~~ type, from Unaka Springs, Aug. ^{not} 18-24, 1904.

Observations_x - The microscopic characters above are based on a study of the type. ~~Spores suggest those of *N. dyothaler*.~~
The spores resembles those of *N. babingtonii*.

Nolanea divacea Murr.

Type

Group I



ch - x 1000



(107)

Pilo - x 1000

24736

ENTOLOMA OLIVACEOBRUNNEA sp. nov.

TYPE

Pileus 7-10 cm broad, convex-expanded, olive-brown (not matched), slightly viscid, glabrous, hygrophanous, margin more or less plicate, even. Context white, greenish under cuticle; odor and taste farinaceous.

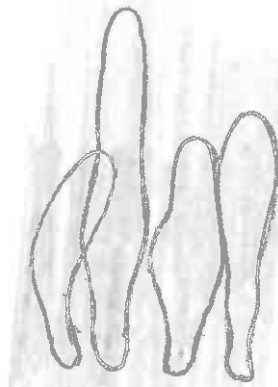
Lamellae emarginate, at first white, then pinkish, close, medium broad, many lamellulae, none forked.

Stipe 5-8 cm long, 10-20 mm thick, white, glabrous, more or less clavate-enlarged below, hollow.

Spores 8-9.5 x 6-7.5 μ , subglobose or ellipsoid, 5-sided, color in deposit: "cinnamon". Basidia 32-41 x 8-11 μ , 2-spored. Pleurocystidia none; cheilocystidia 35-56 x 5-7 μ , clavate, few. Gill trama subparallel, hyphae 7-12 μ broad. Subhymenium gelatinous. Pileus trama radial. Cuticle repent, a narrow zone of surface hyphae gelatinous, a few free ends more or less uplifted. Clamp connections and lactifers none.

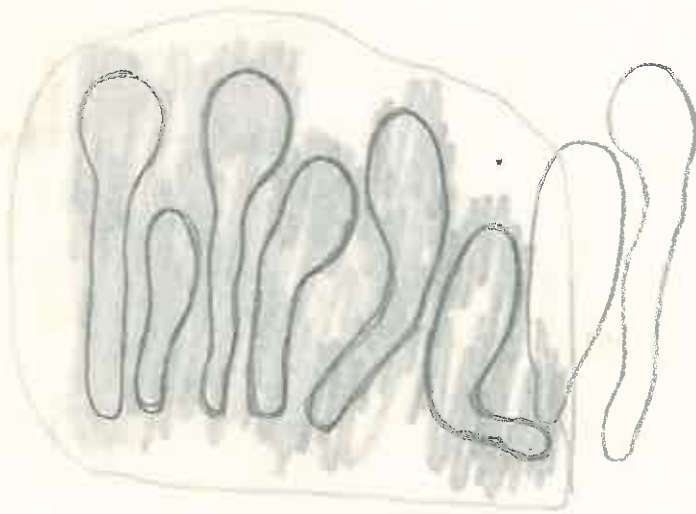
Rhodophyllus olivaceobrunneus

24736



Ch - x 1000

Leptonia No. 75807
olivaceomarginata sp. nov.
Type



Ch - x 1000

29309

RHODOPHYLLUS OLIVACEOSQUAMOSUS

Coweeta Lab., N.C., leg. Petersen, Aug. 11, 1966

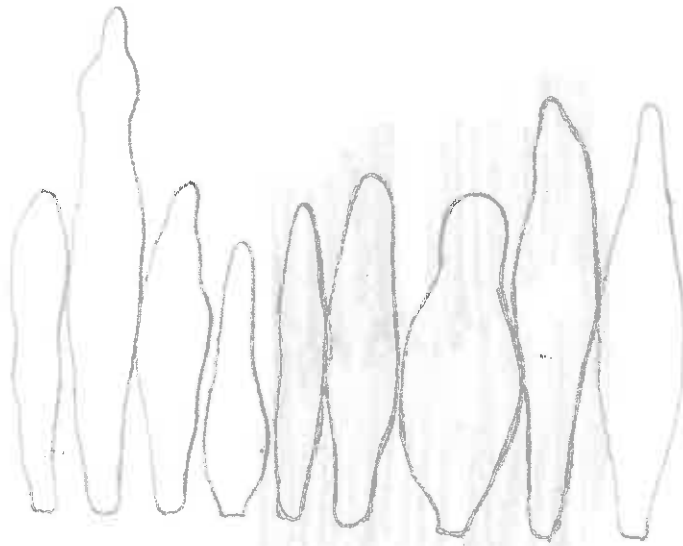
Pileus 2-3.5 cm broad, umbilicate, "light brownish olive", scaly, disc densely scaly and darker, margin even. Context pallid; odor and taste slight.

Lamellae adnexed-sinuate, white, close, medium broad/ behind, narrowed outward, edges concolorous.

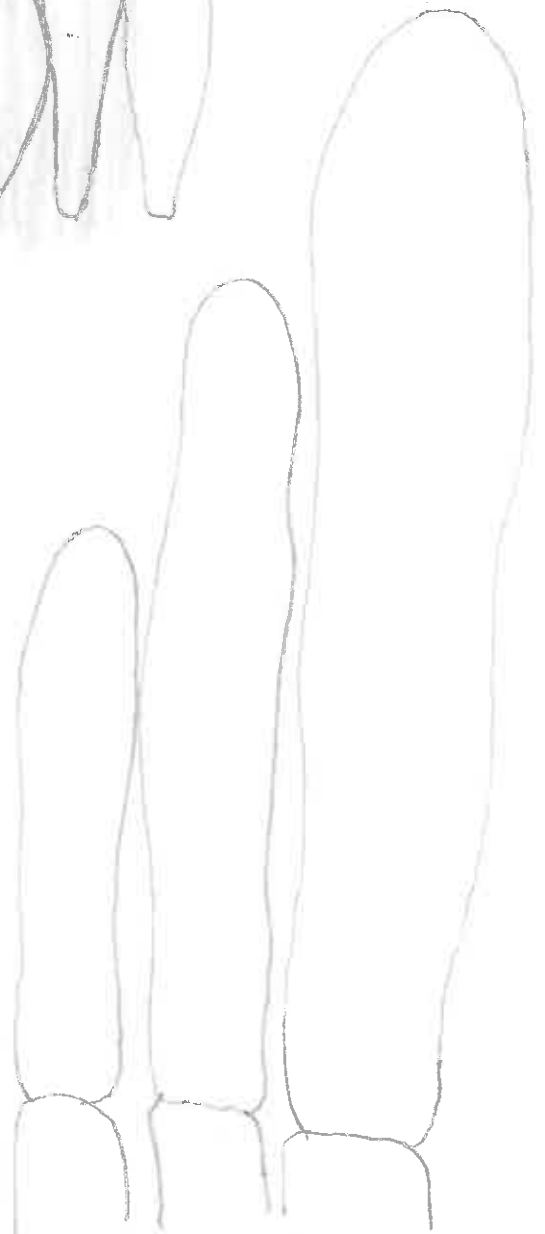
Stipe 4-7 cm long, 1.5-3.5 mm thick, slightly thicker below, concolorous ~~xx~~ or paler, scattered fibrillose, apex white pruinose, hollow.

Spores 8.5-10.5 x 6-7 μ , 5-6-sided. Pl none; ~~xx~~ cheilocystidia 40-60 x 8-14 μ , ventricose, clavate, often with a neck. Pilocystidia present.

Rhodophyllus olivaceosquamosus
No. 28194



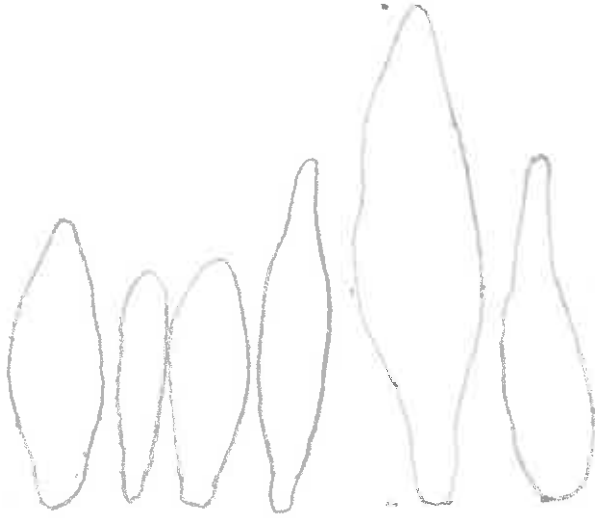
Ch - x 1000



Pds - x 1000

Rhodophyllus olivaceosquamosus sp. nov.

Tam - 28194



Ch - x 1000

See also notes
on paludosa (herein)

LEPTONIA PALLIDIBRUNNEA (Murr.) comb. nov.

this old! Entoloma pallidibrunneum Murr., North Amer. Flora 10:117. 1917.

—Leptoniella earlei Murr., North Amer. Flora 10:90. 1917.

Leptoniella paludosa Murr., Mycologia 9:180. 1917.

Pileus 2-3 cm broad, convex to expanded, umbilicate, hygrophanous, pale-brown, subfloccose, margin entire.

Lamellae adnexed, pallid then pinkish, medium broad, subventricose, rather crowded.

Stipe 4-6 cm x 2-3 mm, pallid, apex farinose, base white-mycelioid, equal, hollow.

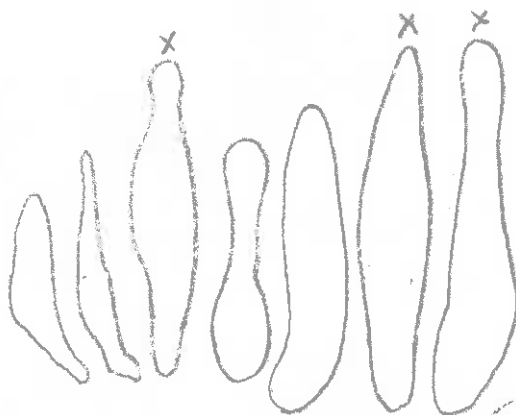
Spores (9) 10-12 x (6) 7-8 μ , 6-sided, at times obscurely 5-6-7-sided. Basidia 25-32 x 6-7 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 24-50 x 4-10 μ , clavate, obclavate, fusoid, at times with a more or less capitate neck. Gill trama subparallel, hyphae 4-9 μ broad. Pileus trama radial. Cuticle repent, with scattered loose tufts of pale fuscous or colorless pilocystidia. Clamp connections and lactifers none.

Habit, Habitat, and Distribution - Among humus, in woods, New York, July-Aug.

Material Studied - NEW YORK: Earle 1583, type of Entoloma pallidibrunneum (NY), from West Park, July 30, 1903; also Earle 1634, type of Leptoniella earlei (N. A. Flora 10:90).

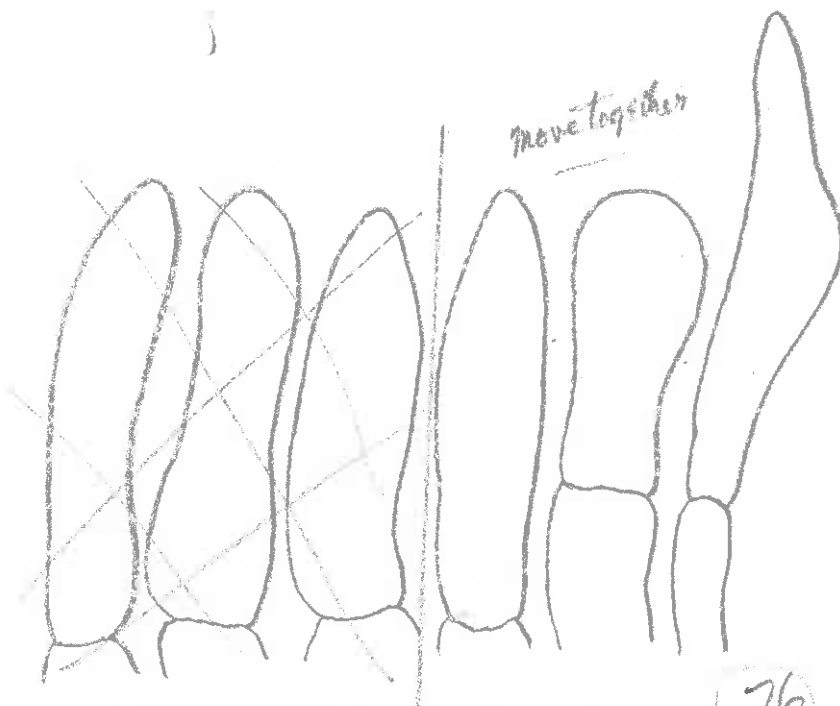
Observations - This species was described by Murrill as Entoloma pallidibrunneum, in N. A. Flora 10:117, 1917. In the same year, in N. A. Flora 10:90, Murrill also described L. earlei; but, subsequently, he discovered that he had earlier used this specific name for another Leptonia (Mycologia 3:272. 1911). He then proposed the species name paludosa (see Mycologia 9:180. 1917) for his earlei (N. A. Flora 10:90). Finally, in my study of the types, I concluded that his Entoloma pallidibrunneum is a Leptonia, and is the same as his L. paludosa. Thus, it is apparent to me that the valid binomial for this agaric is L. pallidibrunnea (Murr.) comb. nov.

~~Entoloma~~ pallidibrunneum Murr.
~~Leptonia~~ Type



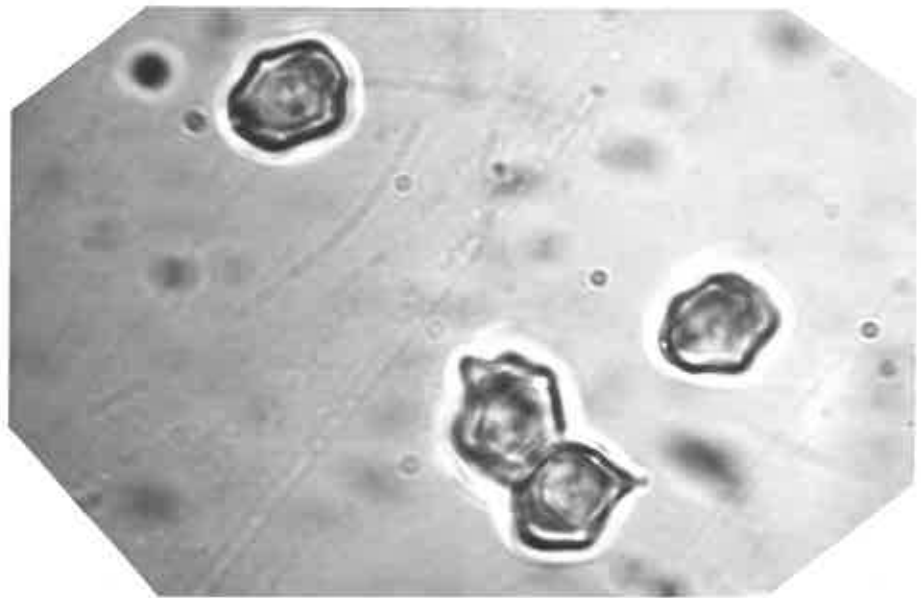
Ch. x 1000

75



Pilo. - x 1000

76



Entoloma pallidibrunneum Murr. - Type

x

Molauca

ENTOLOMA PALLIDICEPS Murrill

Lloydia 8:279. 1945

"Pileus convex to expanded with a distinct conic umbo, solitary, 4-5 cm. broad; surface dry, pallid, shining, finely appressed-silky, margin even, entire to undulate; context very thin, white, unchanging, not farinaceous but odor pleasant and taste mild; lamellae adnexed, inserted, ventricose, rounded behind, 6 mm. broad, close, dirty-pink, undulate to distinctly eroded; spores broadly ovoid in outline, distinctly irregularly angular, mostly pentagonal, usually leoguttulate, about $9 \times 7 \mu$; cystidia none; stipe equal, solid, smooth, shining, subglabrous, pallid, 7 x 0.4 cm.

"Type collected by Prof. J. R. Watson in rich soil under a magnolia in Prairie Hammock, southeast of Gainesville, Fla., May 7, 1944 (F 32987). Suggesting E. albidiforme Murr. but pallid instead of avellaneous, with crowded eroded gills and equal stipe. Evidently rare. ~~XXXX~~ When I first saw it I thought of volvaria but found no volva, and the spores turned out to be angular. Mr. Watson was only a few feet from me, raking the magnolia for catocalas, when he discovered it."

Notes on Type

next pg.

~~Spores 9-10 x 7-8 μ , 5-6 sided. Pleurocystidia and cheilocystidia none. Gill trama subparallel.~~

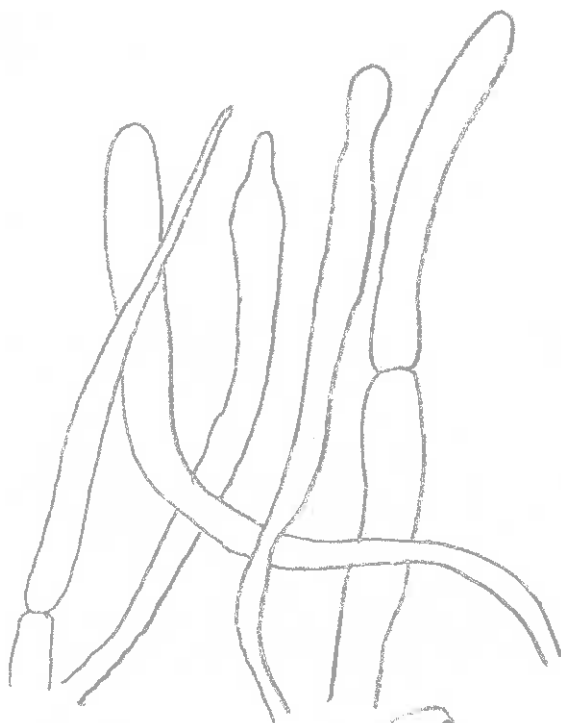
ENTOLOMA PALLIDICEPS Murr..

Lloydia 8:279. 1945

Type, Murrill F32987, on soil, under magnolia, in Prairie Hammock, near Gainesville, Fla., May 7, 1944, coll. by J. R. Watson, det. W. A. Murrill.

Spores 9-12 x 7-9 μ , 5-sided, occasionally obscurely 6-sided, symmetrical. Basidia (28) 32-41 x 10-13 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel. Pileus trama radial. Cuticle repent, the surface hyphae colorless, and frequently more or less uplifted, the terminal elements more or less differentiated as pilocystidia. Clamps and lactifers none.

Eutoloma pallidiceps Murr.
(= *Nolanea*) Type



(108)

Epicuticular hyphae - $\times 1000$

24422

NOLANEA PALLIDIPIES sp. nov.

TYPE

Pileus 12-16 mm broad, "pale pinkish buff" to "pinkish buff," appressed-silky, more or less conic, even. Context thin, whitish; odor mild, taste slightly of grass, then bitterish.

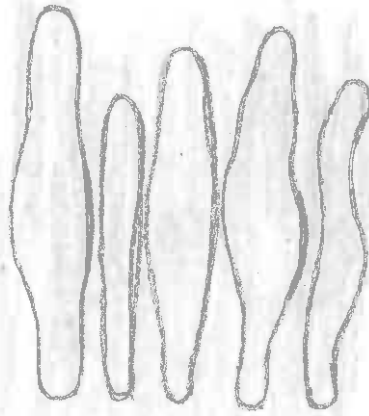
Lamellae adnexed, broad, subdistant, white then flesh pink.

Stipe 3-5 cm long, 1-1.5 mm thick, glabrous, pallid, hollow, equal, fragile.

Spores 9.5-12 x 7-8.5 μ , 5(6)-sided. Basidia 27-35 x 10-12 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 35-68 x 8-10 μ , cylindric, clavate, or flask-shaped. Gill trama subparallel, hyphae 5-9 μ broad. Pileus trama radial. Cuticle repent, a few surface more or less uplifted hyphae. Clamp connections and lactifers none.

Rhodophyllus pallidipes sp. nov.

Term - 24422



Ch - x 1000



Pils - x 1000

22416

LEPTONIA ~~RHOMDISPORA~~ Kühner & Boursienpallido-olivaceus sp. nov.Type

Pileus 1-3 cm broad, convex, depressed, to subumbilicate, near "deep olive buff", silky-shining, disk fibrillose, margin even. Context grayish-olive, thin; odor mild when dry becoming spermatic or of mice when wet; taste farinaceous-bitter.

Lamellae adnate then emarginate, whitish, becoming flesh-tinted, close or nearly subdistant, broad, many short, edges fimbriate, concolorous.

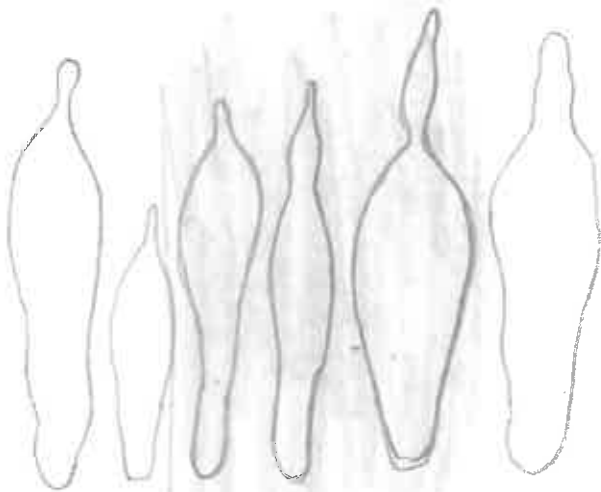
Stipe 5-7 cm x 1.5-3 mm, white to pallid brownish, apex mealy, elsewhere glabrous, hollow.

Spores (8) 9-11 x 7-8.5 μ , 4-5-angles, subquadrate. Basidia 26-42 x 9-11 x 2- and 4-spored. Pleurocystidia 35-58 x 8-17 μ , clavate, fusoid to sub-vesiculose, appendiculate, scattered, at times rare: cheilocystidia ventricose to bottle-shaped or cylindric, 30-43 x 5-15 μ , obtuse, more or less acute, or appendiculate, rather numerous. Gill-trama more or less parallel, hyphae 4-8 μ broad. Pileus trama of pseudoparenchyma. Clamp connections none. Cuticle of repent hyphae, at times more or less erect.

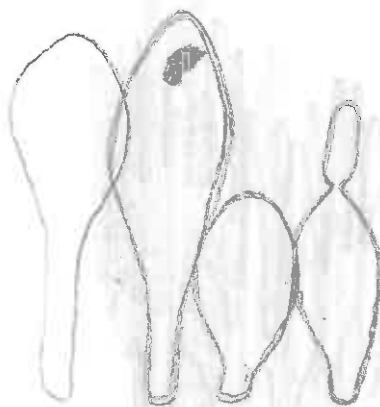
Septoria No. 22416

~~rhombicpora~~
pallido-olivaceus sp. nov.

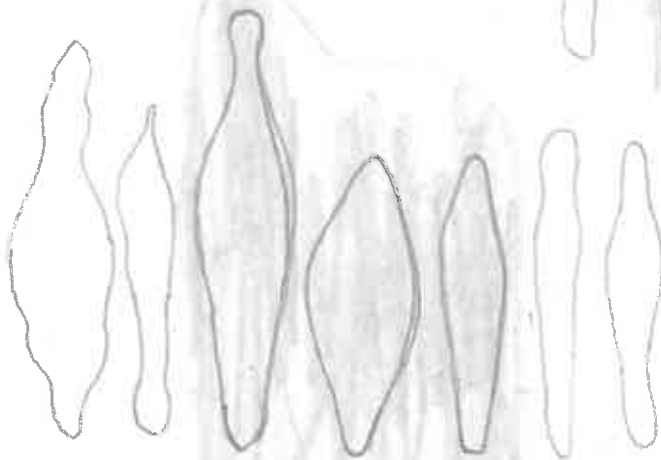
Type



Pl. - x 1000



Caulo - x 1000



Ch. - x 1000

† ENTOLOMA PALLIDUM Murr.

North Amer. Flora 10:114. 1917

Septoria

Pileus 3 cm. broad, expanded and depressed, pallid, tinged rosy-isabelline, glabrous, margin even. Context thin, fragile; odor mild, taste farinaceous.

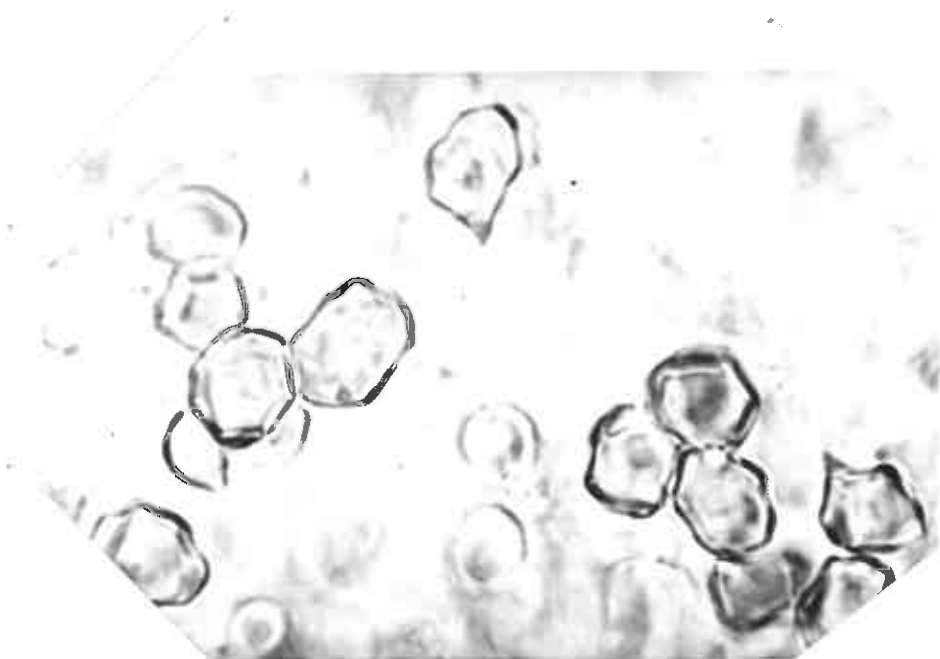
Lamellae adnexed, white to pale pink, rather broad, ventricose, subdistant.

Stipe 4-5 cm. x 3-5 mm., white, glabrous, tapering downward, fragile, hollow.

Spores 9-11 x 7.5-8.5 μ , 5-6-sided, at times obscurely 6-7-sided. Basidia 36-47 x 9-12 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 4-7 μ broad. Pileus trama radial. Cuticle repent, occasionally a few scattered hyphae more or less uplifted. Clamps and lactifers none.

Habit, habitat, and distribution. - In moist woods, New York, August.

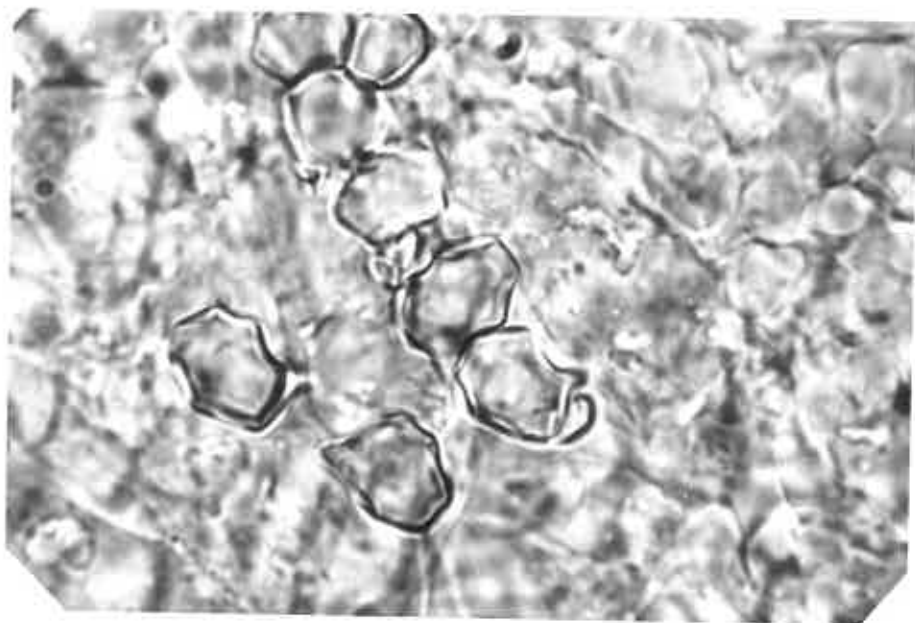
Material studied. - NEW YORK: Earle 1834, type, from West Park, Aug. 1903.



Entoloma pallidum Murr. - Type

X 1800

164



Entoloma pallidum Murr. - Type
X 1800

LEPTONIA PALUDOSA (Murr.) Murr.

Mycologia 9:180. 1917

X
Same as
Ent. pallidiflavum?

Leptoniella earlei Murr., N. A. Flora 10:90. 1917.

Leptoniella paludosa Murr., Mycologia 9:180. 1917.

Pileus $\frac{1}{4}$ cm. broad, depressed, pale-grayish-brown, disk squamulose, margin not striate. Context thin.

Lamellae adnexed, white to pale pink, sub-crowded, rather narrow, subventricose, inserted, edges entire and concolorous.

Stipe 8 cm. x $\frac{1}{4}$ mm., subconcolorous, glabrous, base white-mycelioid, equal.

Spores 10-12 x 7-8 μ , 6-sided, rarely indistinctly 5-sided, symmetrical. Basidia 23-35 x 7-10 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 25-53 x 4-8 μ , erratic in occurrence (absent in many sections), variable: clavate, cylindric, subfusiform, apices obtuse, acute, appendiculate, or somewhat capitate, at times constricted; some fertile basidia also on edge. Subhymenium a very narrow zone of small cells. Gill trama subparallel. Pileus trama radial. Cuticle repent; on the disk clusters of pale fuscous pilocystidia are present, elsewhere a few colorless, hyphal clusters are present. Clamp connections and lactifers none.

Habit, habitat, and distribution. - In humus, edges of swamp, New York, August.

Material studied. - NEW YORK: Earle 1634, the type, from West Park, Aug. 3, 1903.

Observations. - This is the species described in N. A. Flora 10:90, erroneously as Leptoniella earlei Murr. It differs from that described under the same name in N. A. Flora 10:94 in its narrow gills and smaller spores.

Murrill describes the spores as 12-14 x 8-10 μ , but I found them to be 9-12 x 6-7.5 μ .

The description of the microscopic characters above is based on a study of the type.

The specimens box is labelled Leptoniella earlei, but in pencil the species-name is changed to paludosa.

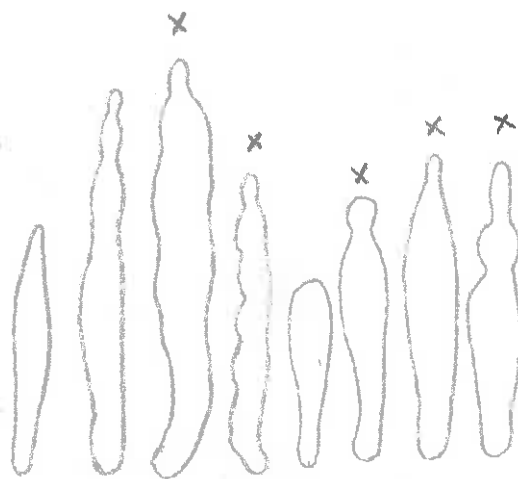
★LEPTONIA PALUDOSA (Murr.)

Mycologia 9:180. 1917

(Earle's collection No. 1634, is labelled Leptoniella earlei; the species-name is crossed out and in place of it is written paludosa. The latter is not in N. A. Flora, but ^{as descr. by Earle, p. 96, Vol. 16, 1907} reference to it in Mycologia 9:180 appears in the general index to Mycologia.)

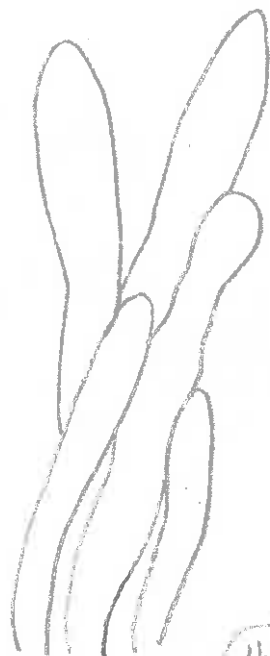
Spores 10-12 x 7-8 μ , 6-sided, rarely indistinctly 5-sided, symmetrical. Basidia 23-35 x 7-10 μ , 2-4-spored. Pleurocystidia none; cheilocystidia 25-53 x 4-8 μ , erratic in occurrence (absent in many sections), variable: clavate, cylindric, subfusiform, apices obtuse, acute, appendiculate, or somewhat capitate, at times constricted; some fertile basidia also on edge. Subhymenium a very narrow zone of small cells. Gill trama subparallel. Pileus trama radial. Cuticle repent; on the disk clusters of pale fuscous pilocystidia are present, elsewhere a few colorless, hyphal clusters are present. Clamp connections and lactifers none.

Leptonia paludosa
Type



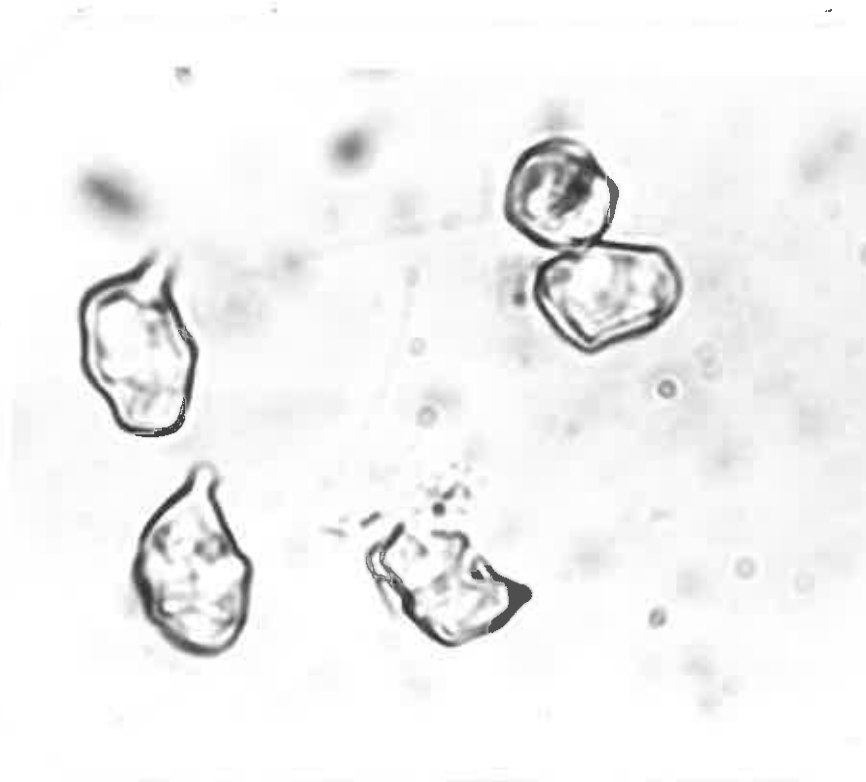
Ch. - x 1000

(41)



(42)

Cutele (scale, from disk) - x 1000



Leptonia paludosa (Murr.) Murr. - Type

x 2500

24836

NOLANEA PAPILLATA Bres.

Fungi Trid. 1:75. 1881

Pileus 16-20 mm., conic-campanulate, slightly umbonate, hygrophanous, pale watery brown (wet), grayish (dry), disc pale buff, canescent, striate. Context pallid-watery, thin, fragile; odor mild, taste farinaceous.

Lamellae sinuate, broad, close to subdistant, pallid then flesh, many lamellulae, edges even.

Stipe 5-7 cm. x 1.5-2 mm., dingy gray-brown, fragile, equal, hollow.

Spores ^{6-7(7.5) μ , ellipsoid.} 9.5-11 x ~~7-8~~ μ , 5-6-sided, Basidia 30-34 x 9.5-11 μ , 4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 7-17 μ broad. Pileus trama radial. Cuticle repent, the surface hyphae ^{colorless but not} appearing ~~slightly~~ gelatinous. Clamp connections and lactifers none.

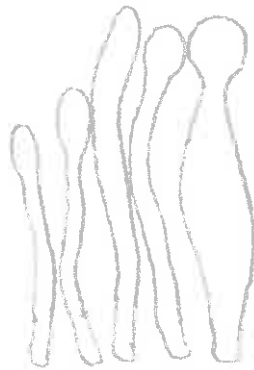
Habit, Habitat, and Distribution - On soil, in deciduous woods, North Carolina, June.

Material Studied - North Carolina: Herler

24836.

Observations - This is distinguished by its small, pale brown, ^{striate, papillate-}umbonate pileus, and its ellipsoid, ~~spores~~ 5-6-sided spores.

Rhodophyllus papillatus (Bres.) Fange.
Bas 1514 (Tern - 29000)



Carlo - x 1000

NOLANEA PAPILLATA

Ex-Herb. Kew. In grass, beside woodland glade, Kings Langer
(Heights?), leg. D. A. Reid, Oct. 19, 1953.

Spores 9.5-10.5 x 6-7 μ , 7-sided, ellipsoid, wavy-nodulose,
angles obtuse. Basidia 24-28 x 7-8 μ , (2)4-spored. Pleurocystidia
and cheilocystidia none. Gill trama subparallel, hyphae 5-12 μ
broad. Subhymenium not distinctive. Pileus trama radial.
Cuticle of repent, brown hyphae, a few incurved^{rusty}, the terminal
elements at times as brown, clavate pilocystidia.

NOLANEA PAPILLATA

Ex-Herb. Kew. In grass, beside woodland glade, Kings Langer
(Heights?), leg. D. A. Reid, Oct. 19, 1953.

Spores 9.5-10.5 x 6-7 μ , 7-sided, ellipsoid, wavy-nodulose,
angles obtuse. Basidia 24-28 x 7-8 μ , (2)4-spored. Pleurocystidia
and cheilocystidia none. Gill trama subparallel, hyphae 5-12 μ
broad. Subhymenium not distinctive. Pileus trama radial.
Cuticle of repent, brown hyphae, a few incurved^{rusted}, the terminal
elements at times as brown, clavate pilocystidia.

29000 RHODOPHYLLUS PAPILLATUS s. Kühner & Romagnesi

Netherlands, prov. Friesland, Island Terschelling, 30 VII 1958.

In sandy meadow near the sea; among grasses and *Salix repens*. Description by C. Bas 1514.

Slender, cap and stem dark brown, apex of stem powdery, cap hygrophanous, streaky when drying.

Spores 10.5-11.0 x 8.7-9.2 μ . Basidia 4-spored, with clamps. Pigment encrusting. A single marginal cell observed.

Resembles Bres. 585 (as *Nolanea clandestina*) more than Lange 78D which figure is too pinkish (P.S. I do not know this species very well, so do not rely on my determination too much!)

Notes by Hesler

Spores 9.5-11 x 7-8.5 μ , 6-sided. Pleurocystidia and cheilocystidia none. Subhymenium not distinctive. Pileus trama radial. Cuticle repent. Caulocystidia in tufts, colorless, ventricose to filamentous, usually slightly capitate, 32-44 x 3-10 μ .

ESCILIA PARKENSIS Fr. ?

Collection from Mus. Botan., Stockholm, apparently communicated by Bresadola, Nov. 1900, and doubtfully named. A. note says that it has been seen by H. Romagnesi, 1943, but determination not confirmed.

Spores 8-9.5 x 6-7 μ , mostly with obscure angles and sides, 5-7- or 8-sided.

Material did not section satisfactorily for critical study.

12196

LEPTONIA PARVA Pk.

Pileus about 12 mm broad, convex or nearly plane, umbilicate, violaceous-brown, umbilicus dark and squamulose, slightly radiate-striate. Context thin.

Lamellae adnate, whitish, tinged flesh-color, subdistant, broad.

Stipe 2.5 cm x scarcely 2 mm, concolorous, glabrous, solid.

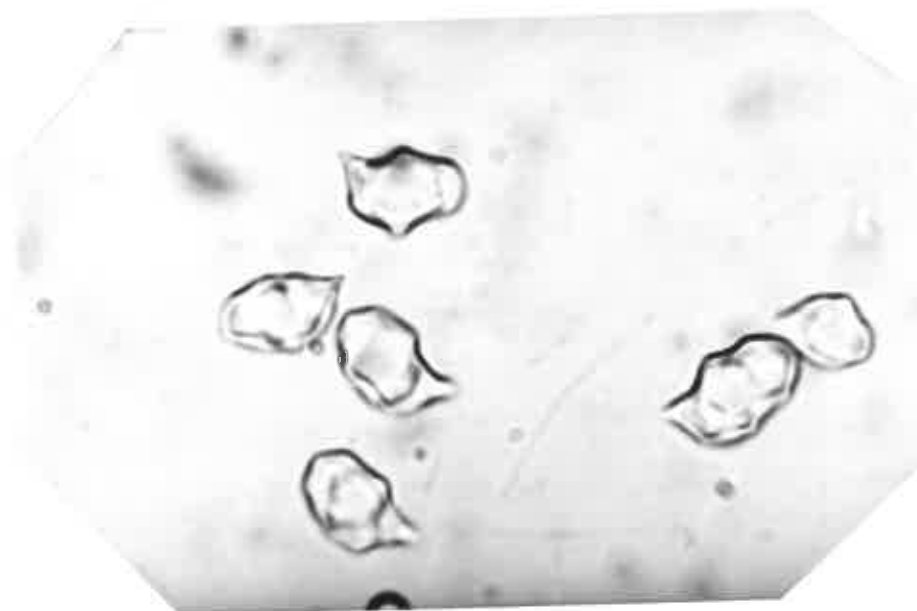
Spores 7.5-10 x 5-6 μ , 5-7-(9)-sided, at times sides and angles somewhat obscure. Basidia 19-23 x 6-7 μ , 2-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel. Pileus trama radial. Cuticle repent, with occasional hyphal clusters more or less erect. Clamps and lactifers none.

Leptoma 12196

(~~near Korea~~) parva PK.



Cuticle - x 1000



Leptonia No. 12196

parva PK.

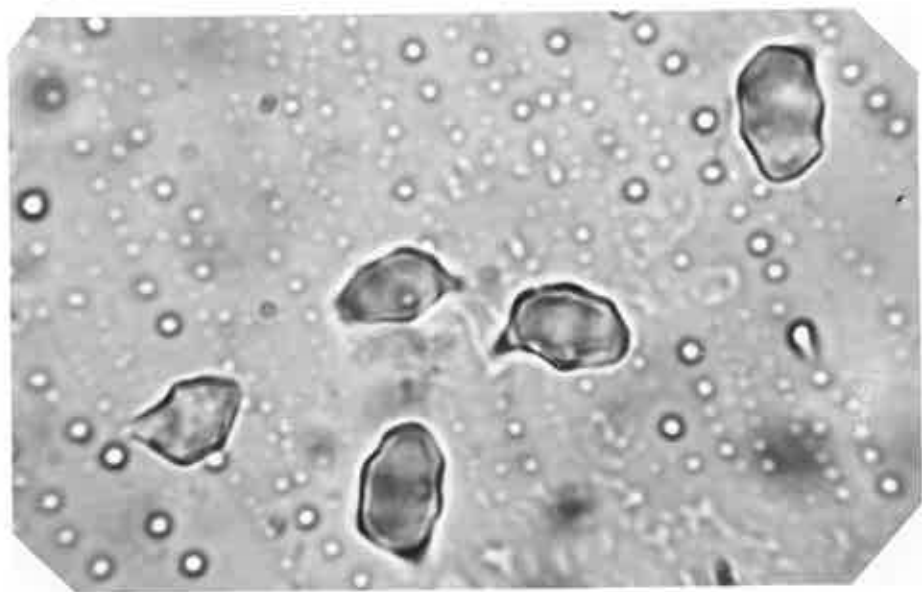
III



12196 - ^R~~Leptomyces~~ ^{parva} (Pk.) - x $\frac{5}{3}$



12196 - *Leptonia* (~~near rosea~~) *parva* (Pk.).
x $\frac{3}{4}$



Leptonia parva K. — Type



Leptonia parva Fk. - Type

NOLANEA PARVIPAPILLATA Murr.

North Amer.

N. A. Flora 10:97. 1917

Pileus 1-2 cm/ broad, convex then expanded, minutely papillate, pallid, dry, subsilky, not striate. Context thin, pallid; taste mild.

Lamellae sinuate or adnate, pallid then pink, subdistant, somewhat ventricose, medium broad, several lamellulae.

Stipe 4-5 cm, *long*, *thick*, 2-3 mm, pallid, glabrous, base white-mycelioid, somewhat compressed, solid.

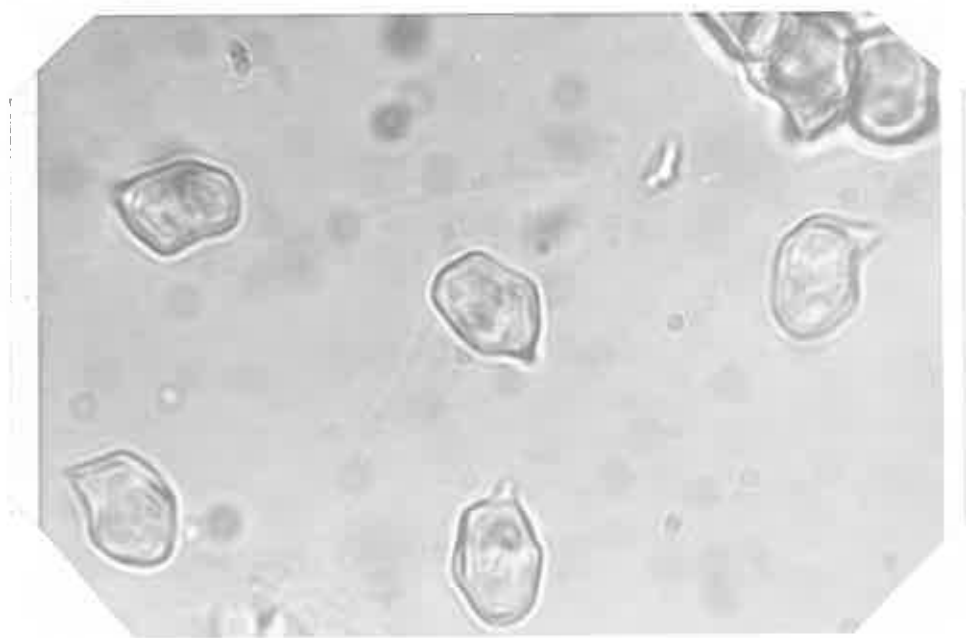
Spores 8-10 (11) x 5.5-7.5 μ , 5-6-sided, at times subnodulose and obscurely 6-7-sided, ~~symmetrical~~. Basidia 27-33 x 8-10 μ , 2-spored, more rarely 4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel. Pileus trama radial. Cuticle ~~repent~~, the surface hyphae colorless, broad (10-20 μ); no pilocystidia. Clamp connections and lactifers none.

Habit, habitat, and distribution - On soil, in woods, New York and Tennessee, July-August.

Material studied - NEW YORK: Earle 768, the type, from New York Botanical Garden, July 30, 1902; TENNESSEE: Hesler 12250, Great Smoky Mountains National Park, Aug. *just* 6, 1939.

Observations - The above description of microscopic characters is based on a study of the type. ~~My 12250 agrees with the type.~~

57



Nolanea parvipapillata Muer. - Type.

x 2000



Nolanea parvipapillata Murr. - Type

x 1700

Photo by T.H. Campbell

Nolanea

12250

NOLANEA PARVIPAPILLATA Murrill

Pileus 8-16 mm. broad, convex, slightly papillate, whitish, minutely fibrillose, margin even. Context pallid, thin; odor and taste mild.

Lamellae adnate becoming adnexed, subdistant, medium broad, whitish then flesh pink, edges concolorous, even.

Stipe 3-4 cm. x 1-2 mm., pallid, glabrous, base white-mycelioid.

Spores 8-9 (10) x 6-7.5 μ , 5-sided, more rarely 6-sided. Pleurocystidia and cheilocystidia none. Gill trama subparallel. Pileus trama radial. Cuticle repent, the surface hyphae colorless, 6-10 μ broad. Clamps and lactifers none.

Habitat and distribution. - On soil and humus, in mixed woods, Tennessee, August.

Discussion. - No. 12250 agrees with the Type.

X ENTOLOMA PARVULUM Murr.

North Amer. Flora 10:114. 1917

Helvella

Pileus 2-2.5 cm. broad, convex to plane, not umbonate, white, with a pale ashy tint, pruinose to glabrous, dry, margin conspicuously striate to the disc. Context thin.

Lamellae sinuate, white to salmon-colored, narrow, not crowded, several times inserted, edges entire.

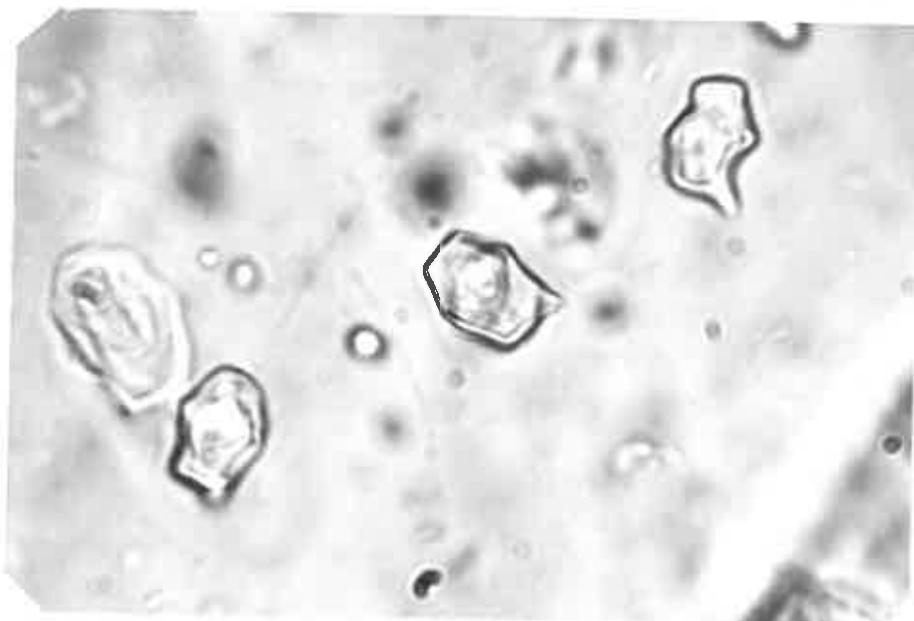
Stipe 2 cm. x 2 mm., white, glabrous, equal.

Spores 9-11 x 6-8 μ , 5-6-sided, at times obscurely 6-7-sided. Basidia 34-47 x 10-12 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, hyphae 4-7 μ . Pileus trama radial, hyphae narrow, 4-7 μ . Cuticle repent, with more or less uplifted narrow hyphae at scattered intervals. Clamps and lactifers none.

Habit, habitat, and distribution. - On soil, in woods, New York, September.

Material studied. - NEW YORK: Murrill, type, New York Botanical Garden, Sept. 13, 1910.

Observations. - This is a *Lepiota*.



165
Entoloma parvulum Murr.

LEPTONIA PARVULA (Murr.)

* Eccilia parvula Murr., N. A. Flora 10:82. 1917.

The type (Earle 318) consists of only a fragment of the
stipe-base.

Collected in New York,

LEPTONIA PARVULA (Murr.) comb. nov.

Nolanea parvula Murr., North Amer. Flora 10:99. 1917.

Pileus 1 cm broad, convex, umbilicate, uniformly grayish-brown, glabrous, striate. Context thin.

Lamellae adnexed, pallid to pinkish-gray, subdistant, broad, subventricose, somewhat interveined.

Stipe 3-4 cm x 1 mm, concolorous, equal, glabrous, cartilaginous.

Spores 9.5-11 x 7-8.5 μ , 5-sided, pale-pink. Basidia 28-34 x 9-11 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel, Pileus trama radial. Cuticle repent, with a few colorless, surface hyphae more or less erect, the terminal elements occasionally as pilocystidia. Clamp connections and lactifers none.

Habit, Habitat, and Distribution - On soil, in woods, New York, July.

Material Studied - NEW YORK: Earle 319, type (NY), New York Botanical Garden, collected by F. S. Earle, July 8, 1902.

Observations - The microscopic characters above are based on a study of the type. The umbilicate pileus and slender stipe place this species in the genus Leptonia.

NOLANEA PARVULA MURR.

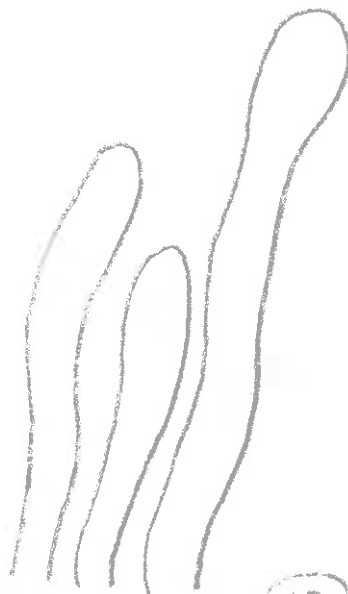
(a Reptonia)

Type

Coll. on soil, in woods, in N.Y. Bot. Garden, F.S. Earle
No. 319, July 8, 1902.

Spores 9.5-11 x 7-8.5 μ , 5-sided, pale pink. Basidia
28-34 x 9-11 μ , 2-4-spored. Pl. & ch. none. Gill trama
subparallel. Pileus trama radial. Cuticle repent, with a few
colorless, surface hyphae which are more or less erect, the
terminal elements occasionally pilocystidioid. Clamp connections
and lactifers none.

Nolanea parvula Merr.
Type (= *Leptonia*)



(43)

Pileosptidia - x 1000

NOLANEA PASCUA ?

Stockholm, det. H. Romagnesi, 1949, leg. North America
(data incomplete).

Spores 9.5-11 x 7.5-9 μ , 5(6)-sided, sided flat, ovoid.
Basidia 28-33 x 8-9 μ , 4-spored. Pleurocystidia and cheil-
cystidia none.

Apparently doubtfully identified by Romagnesi; and material
not the best. Of little value.

Nolanea

ENTOLOMA PECKIANUM Burt

Collection borrowed from Farlow Herbarium, through I. MacKenzie Lamb, Oct. 24, 1962. I requested the type, if deposited there, and Dr. Lamb sent this collection. There are notes on the packet, apparently by Burt, saying that it was collected in a Sphagnum bog, Floodwood, N. Y., Aug. 27, 1900. This is apparently the same species as borrowed from Peck's herbarium. Notes on my study of this collection follow:

Spores 10-12 (13) x 8-9 μ , 5(-6)-sided. Basidia 21-28 x 7-8 μ , 2-4-spored. Pleurocystidia rare (absent in most sections), more or less collapsed, colorless, 42-53 x 8-12 μ , clavate to subfusoid; cheilocystidia rare (absent in most sections), colorless, 40-42 x 6-9 μ . Gill trama subparallel, hyphae 4-8 μ broad. Pileus trama radial. Cuticle a zone of more or less repent hyphae with dark brown contents, the terminal elements repent to more or less erect, clavate, dark brown (pilocystidia).

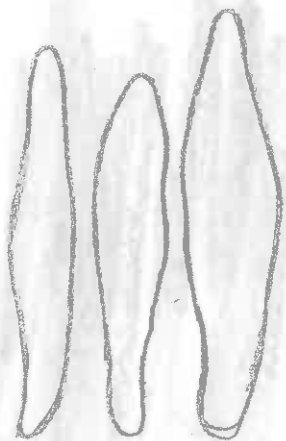
The carpophores are dark brown to blackish, shining, conic, at times more or less cuspidate, not expanding, and resemble those from Peck's herbarium.

On Burt's packet (from Harvard) are handwritten notes—a description of it, including this comment: "Bresadola notes in regard to a spec. from this collection, 'Entoloma Peckianum Burt is Nolanea juncea Fr. var. cuspidata'."

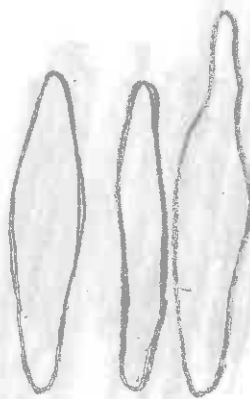
My Nos. 22558, 22952, and 24620, tentatively identified

as Ent. (Nolanea) peckianum, differ from this species in the following characters: (1) my specimens do not become blackish and shining on drying; (2) they (caps) dry in radial streaks; (3) odor and taste more or less farinaceous or like fresh grass; (4) gills pallid to grayish at first. These collections may be Ent. strictius.

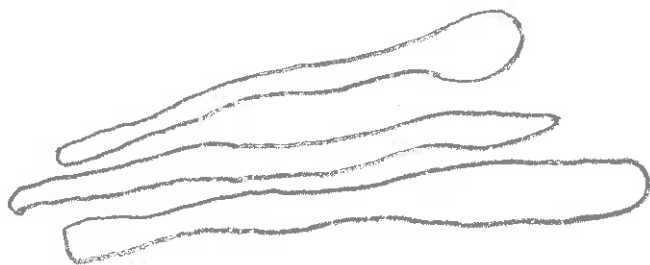
Entoloma peckianum Burt
(Part of Type) from Farlow Herbarium



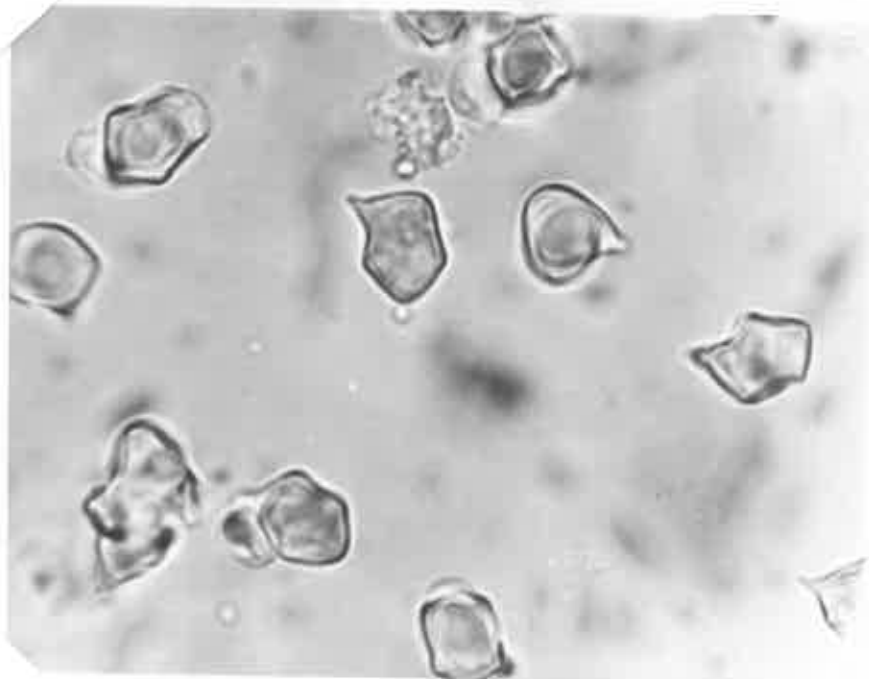
Pl - x 1000



Ch - x 1000



Pilo - x 1000



Entoloma peckianum Burt

Peck's collection

II Les Rhodophylles de Madagascar

(*Entoloma*, *Nolanea*, *Lepistoma*, *Eccilia*, *Claudoporus*)

Par Henri Romagnesi

Paris, 1941

NOLANEA (VERSATILES)

97

et qui nous a toujours libéralement accordé au Laboratoire de Cryptogamie du Museum une si large hospitalité.

En révisant dans l'Herbier général de ce Laboratoire les espèces que Patouillard avait décrites de Madagascar, dans l'un de ses derniers travaux [12], nous avons constaté que le champignon en qui il avait cru reconnaître le *Rh. sericeus*, si commun en Europe, présentait en réalité tous les caractères de notre *Heimii* : il suffira au lecteur de confronter les deux descriptions pour constater leur remarquable concordance; seule la taille des exemplaires recueillis par M. Decary est un peu plus élevée, mais cela n'a aucune signification taxonomique.

Ainsi donc, il convient de supprimer *Rh. sericeus* sur la liste des espèces de Rhodophylles malgaches : la confusion de Patouillard provient d'un examen trop superficiel des spores : le véritable *sericeus* possède en effet des spores subglobuleuses asymétriques, et appartient donc à la section toute différente des *Sphaerospori*, non encore représentée à Madagascar.

RHODOPHYLLUS PECKIANUS (Burt. in Peck) Romagn.

var. SPECIOSUS n. var.

Syn. : Patouillard : Contribution à l'étude des champignons de Madagascar, Mém. Acad. malgache, VI, 1927, sub *Rh. pascuo*.

Caractères macroscopiques :

PERIDIUM d'abord conique, puis plus ou moins aplani, avec dans la jeunesse un mamelon très aigu, mais qui s'atténue beaucoup par la suite, régulier, assez charnu, non fragile, gris ou gris brun à sommet plus foncé, marqué de brun noir, 15-30 mm., à surface finement vergetée, ridulée, presque glabre ou un peu fibrilleuse.

STIPE charnu, cylindrique, ou un peu plus épais vers la base, droit, un peu fistuleux (très étroitement) blanc, longuement strié longitudinalement, et même un peu torsadé, de consistance ferme, 40-60 × 3-4 (5 en bas) mm.

LAMELLES assez serrées, inégales (lamellules nombreuses), minces, libres ou seulement adnexées par une petite dent, semi-ventrues, avec l'arête fortement arrondie, gris rosé.

CHAIR mince au bord, épaisse au milieu, blanchâtre, à odeur un peu farineuse.

Caractères micrographiques :

SPORES subglobuleuses simples ($\frac{5 \wedge 5}{\text{ou } \frac{6}{5}}$) évoluant rarement dans la direction du type complexe, 9-12 × 8-9 μ .

BASIDES subclaviformes, avec deux gros stérigmates divergents, longs et volumineux, mesurant 32-40 × 7-8 μ .

CYSTIDES FACIALES et **MARGINALES** nombreuses, fusoides lagéniformes, terminées par un long col aigu, à parois délicates et minces, peu réfringentes, mesurant $75-85 \times 12-15-20 \mu$, avec en général la partie supérieure envahie par une substance granuleuse jaune paille sale sur les exemplaires conservés dans le formol (le jaune est plus franc si on observe les cystides dans l'acide

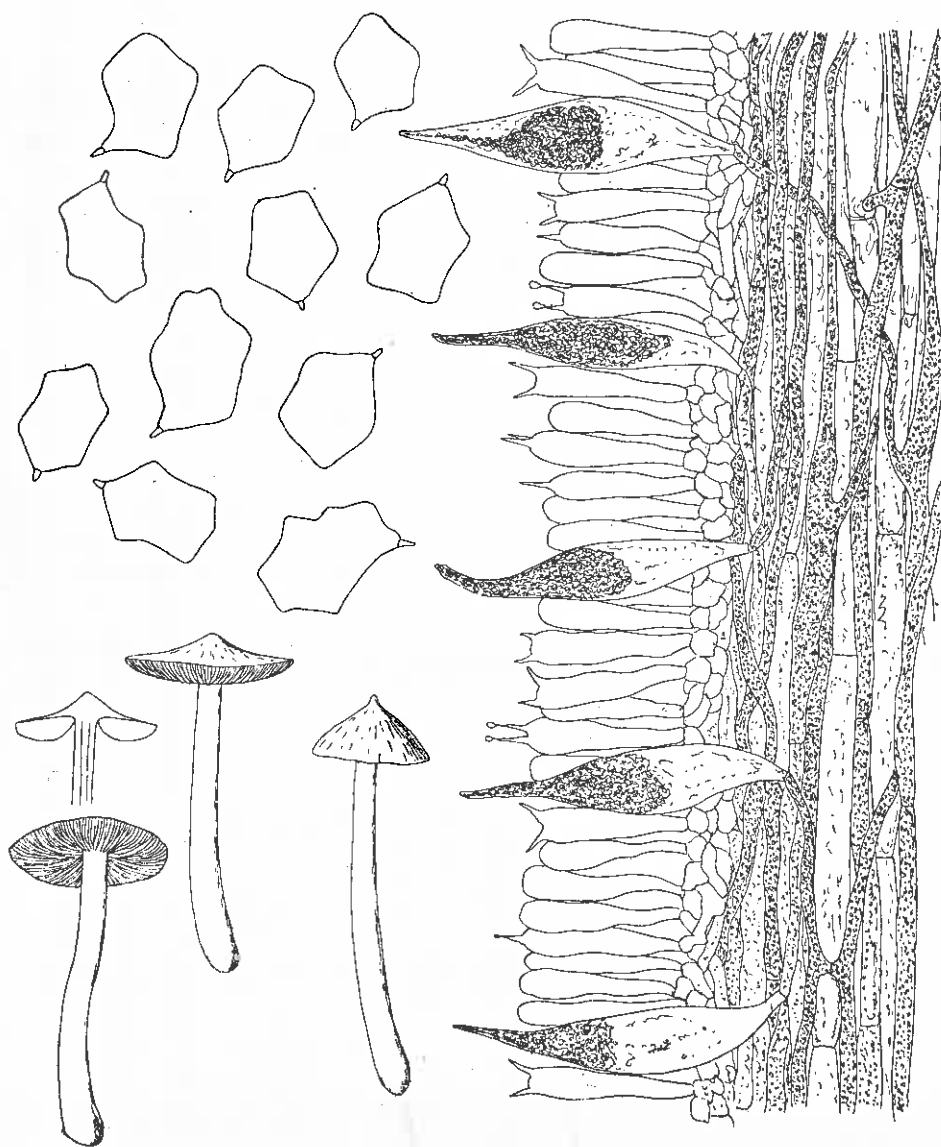


Fig. 17. — *Rhodophyllus Peckianus* (Burt. in Peck) Romagn., var. *speciosus* Romagn.

A gauche, spores et carpophores ; à droite, fragment de coupe dans une lamelle, montrant les basides, les cystides avec leur contenu granuleux et coloré, les cellules du sous-hyménium et les hyphes p. ou m. guttulées du médiostate. Les cystides ont été figurées plus rapprochées les unes des autres que dans la nature.

sulfurique)
cystide ap
d'un beau

CHAIR

13-15 μ , e
parfois en
formol, rem
cystides ; c
dans le mé
oléifères qu
Les hyphes
7,5-10 μ .

Habitat et

Dans l'hy
Decary. — 1
17 décembre

Matériel ex

3 beaux
base à notre
par Patouille

C'est une
de celles de
tides, la cuti
plaire récolt
avec *Nolane*
porus, *hirtip*
et, en tous
Parmi les es
il faut citer d
ainsi que l'E
allongée, ce q
type nous l'a
Versatiles m
qui nous auto
congénères et
Quant à l
semble très v
du Nord, don

Chapeau fr
hygrophanes, br
lamelles adnéc
blanchâtres pu
leux-strié, brus

ENTOLOMA PECKIANUM Burt.

(Coll. Chas. H. Peck, Aug., Floodwood.)

(May be the type but not so marked)

Spores $9-14 \times 7-8.5 \mu$, 5-7-sided, at times obscurely so. Basidia $29-34 \times 7-10 \mu$, 2-4-spored. Pleurocystidia none; cheilocystidia $35-40 \times 7-8 \mu$, rare, clavate or flask-shaped. Gill trama subparallel, hyphae $5-8 \mu$ broad. Pileus trama radial. Cuticle of brown, repent hyphae, free ends more or less erect as brown pilocystidia. Clamp connections and lactifers none.

Cf. a collection from Farlow Herb. which seems to be the same species, except that a few pl. were found in the coll. from Farlow. (See my notes on that collection, - next page.)

x

peckiana
NOLANEA NO. 10768

Pileus 2.5-4 cm., convex-conical, umbonate, "sage brown" to "snuff brown," disk blackish^{ish}, fibrillose-scaly, the scales small and delicate and slightly darker than background of pileus, not hygrophanous, ~~thin and~~ delicate, often splitting, margin even. Context thin (1 mm. or less), pallid whitish; odor and taste mild.

Lamellae narrowly adnate, seceding, at first whitish, then flesh-pink (near "salmon-buff"), ^{close or nearly} subdistant, broad (about 5 mm.), broadest behind and rounded, many short, edges even.

Stipe 6-7 cm. x 2-3 mm., pallid-whitish, tapering upward, twisted somewhat, striate, often 2-3 connate at base, easily splitting, slightly brown-fibrillose, base white-mycelioid, cartilaginous, hollow.

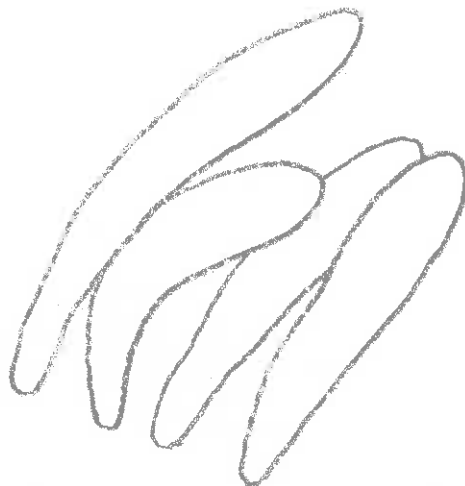
Spores 9-12 x 7-8 μ , mostly 5-angled, angles sharp, "rufous" in mass. Basidia 27-31 x 8-10 μ , 2-4-spored. Pleurocystidia none; cheilocystidia rare, ventricose, or subclavate, at times rostrate or appendiculate, 30-58 x 6-16 μ . Gill trama subparallel, hyphae 3-6 μ broad. Pileus trama radial, with scattered clusters repent to erect of brown, clavate pileocystidia. Clamps and lactifers none.

This seems to be *peckiana* which, however, according to Peck, dries blackish. Mine dry dark brown.

Nolanea No. 10768
pectinana



Ch - x 1000



Pils - x 1000

Entoloma peckianum Burt

Not marked type.

(Coll. by Peck, ~~Flaswood~~ ^{Flaswood}, N.Y., Aug.)



Ch - x 1000



Pils - x 1000

22952

Poekeanium (Burt)
NOLANEA NO. 22952

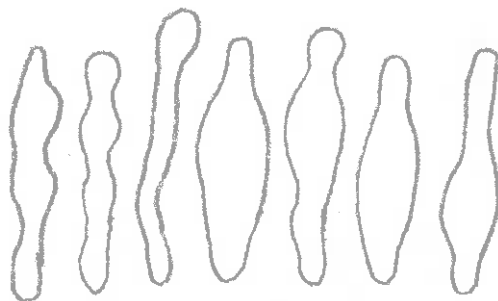
Pileus 3-7 cm. broad, convex, expanding-convex, umbonate, umbo at times coarse and prominent, occasionally sub-mammillate, shining, "light brownish olive," glabrous, margin even. Context thin, brittle, white; odor like green grass, taste astringent.

Lamellae emarginate, whitish at first, finally "light pinkish cinnamon," close, medium broad, edges even or nearly so.

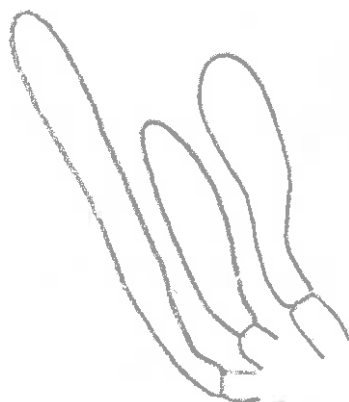
Stipe 7-10 cm. x (2) 3-5 mm., strict, twisted, cartilaginous, tinged olive (like pileus), apex white-mealy, elsewhere glabrous, base white-mycelioid, hollow dry.

Spores 10-13.5 x 6-8 μ , angular, 6-8-sided. Basidia 36-44 x 10-12, 2-4-spored. Pleurocystidia none; cheilocystidia 30-36 x 5-10 μ , few, flask-shaped, cylindric, clavate, or ventricose, at times constricted, occasionally capitate. Gill trama subparallel, hyphae 6-13 μ . Pileus trama radial. Cuticle repent, with repent or slightly semi-erect, brownish to fuscous, clavate pilocystidia. Clamps and lactifers none.

Nolanea pectinatum
No. 22952



Ch - x 1000



Pilo - x 1000

LEPTONIA PENTAGONOSPORA (Atk.) comb. nov.

Eccilia pentagonospora Atk., Jour Myc. 8:113. 1902.

Pileus 0.5-1.5 cm broad, umbilicate to infundibuliform, mouse gray to light gray, fibrous-striate. Context very thin.

Lamellae decurrent, ascending, flesh-colored, not very crowded, rather broad (2-4 mm).

Stipe 2-3 cm x 1-2 mm, concolorous, white within, cylindric, even, solid, at times with white fibers at the base.

Spores 7.5-10 x 6-8 μ , 5-sided (4-angled), subglobose or ellipsoid. Basidia 24-30 x 9-11 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Subhymenium of cells 6-10 μ in diameter. Gill trama subparallel. Pileus trama radial. Cuticle repent, with scattered clusters of colorless, more or less vesiculose pilocystidia. Clamp connections and lactifers none.

Habit, Habitat, and Distribution - On lawn, New York, June.

Material Studied - NEW YORK: Atkinson, 6078, type (CUP), from lawn, Ithaca, June 29, 1901.

Observations - My No. 13096 may be related to L. pentagonospora, but there are important differences: in 13096, the odor and taste are farinaceous, gills adnexed, and the spores 5-6-sided and ovoid-ellipsoid. The description of microscopic characters above is based on a study of the type.

LEPTONIA PENTAGONOSPORA (Atk,) comb. nov.

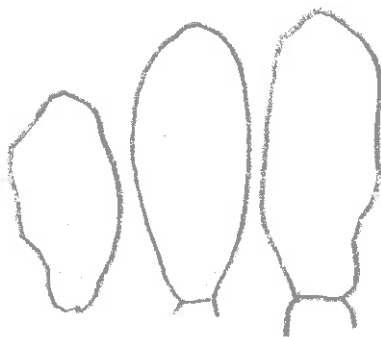
(Eccilia pentagonospora Atk.)

Type

Coll. by Atkinson, on lawn, Ithaca, N.Y., June 29, 1901.

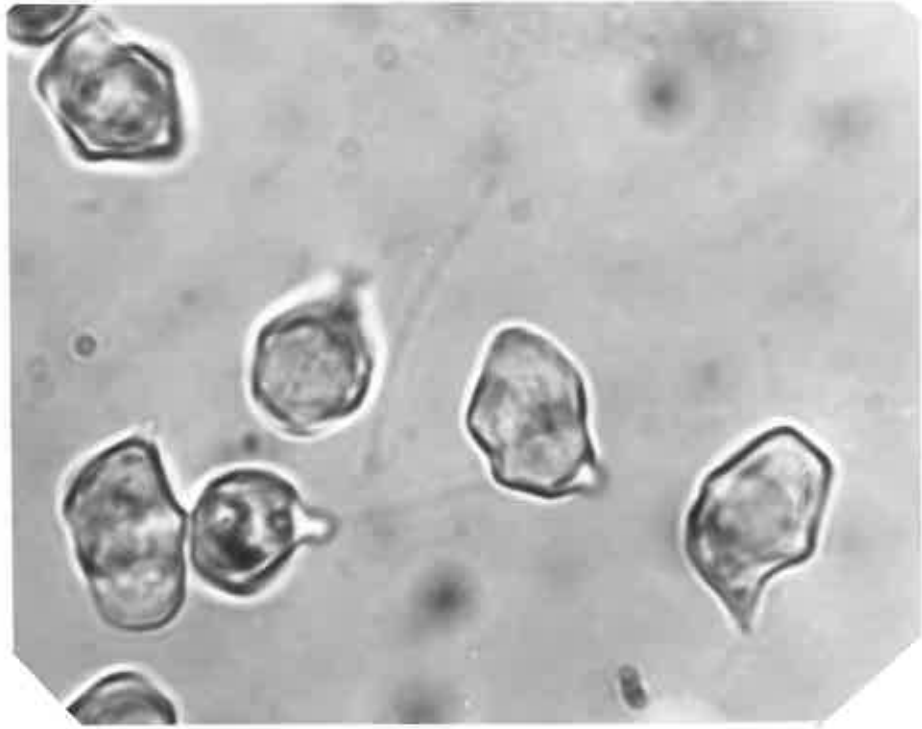
Spores 7.5-10 x 6-8 μ , 5-sided(4-angled), subglobose or ellipsoind. Basidia 24-30 x 9-11 μ , 2-4-spored. Pl. & ch none. Subhymenium of cells 6-10 μ diam. Gill trama subparallel. Pileus trama radial. Cuticle repent, with scattered clusters of colorless, more or less vesiculose pilocystidia. Clamp connections and lactifers none.

Leptonia (Eosilia) pentagonospora (Atk.)
Type



44

Pilocystidia - $\times 1000$



Eccilia pentagonospora Atk.

Type

+ ENTOLOMA PERALBUM Murr.

apparently
not published

Type, Murrill F39798, on soil, under laurel oak, Gainesville, Fla., November 19, 1947.

Spores 8-10 (11) x 7-8 μ , 5-sided (4-angles). Basidia 32-43 x 10-12 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Gill trama subparallel. Pileus trama radial. Cuticle repent, the surface hyphae colorless, at times more or less uplifted; no pilocystidia. Clamps and lactifers none.

61



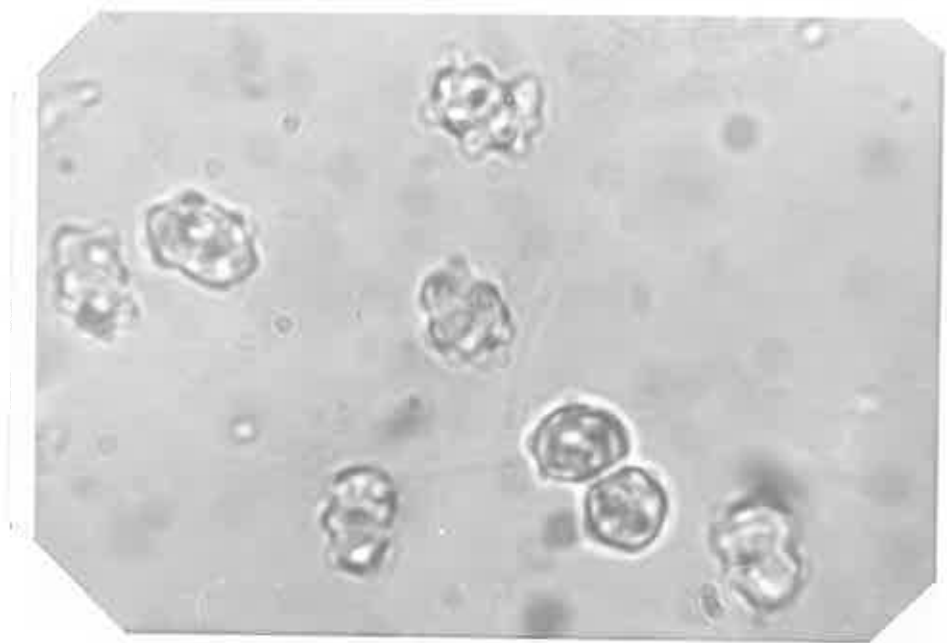
Eutoloma peralbum Murr. - Type

x 1800

= Inocybe
★ ENTOLOMA PERNIVOSUM Murr.

Mycologia 33:444. 1941

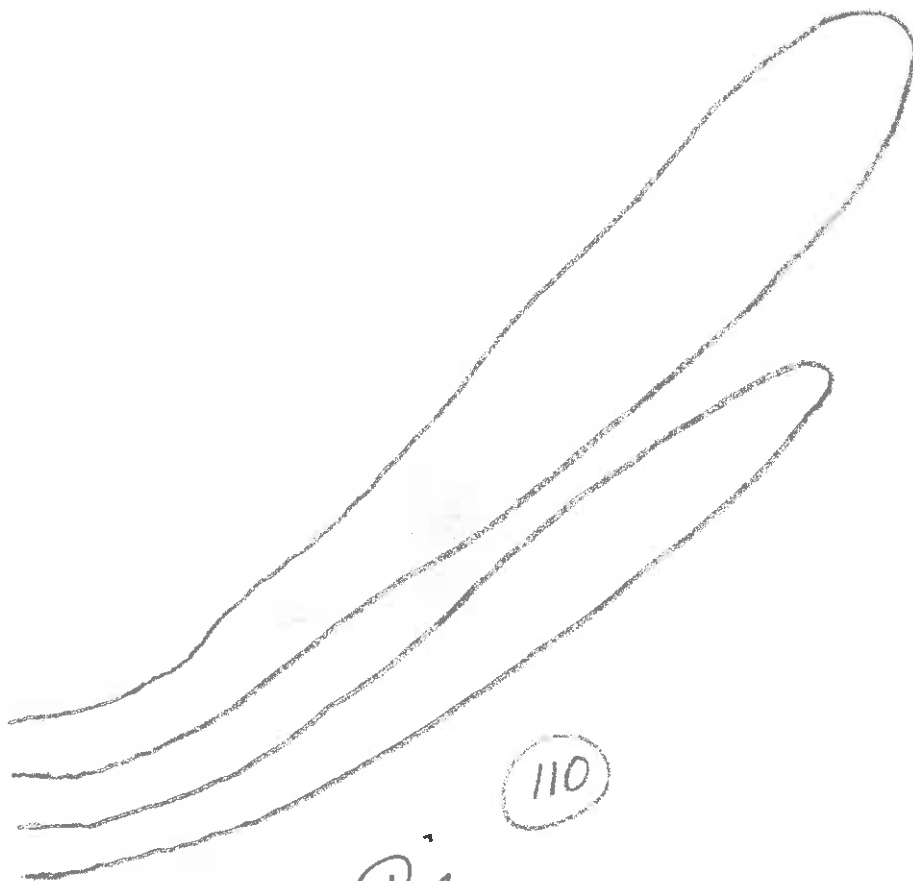
This is clearly a typical Inocybe: Inocybe pernivosa
(Murr.) Sing. (see Agar., p. 534).



Eutoloma peruvosum Murr. - Type
(= *Inocybe peruvosa* (Murr.) Singer)

Nolauea pinicola (Murr.)
(= *Ent. pinicola*)

Type



110

Pilo - x 1000

LEPTONIA PLACIDA (Fr.) Kummer

Der Führer in die Pilzk., p. 96. 1871

Agaricus (Leptonia) placidus Fr., Syst. Myc. 1:202. 1821.

Rhodophyllus placidus (Fr.) Quél., Enchir. Fung., p. 60. 1886.

Pileus 2-2.5 cm broad, convex-plane, grayish, blackish villose-squamulose, non-hygrophanous, margin even. Context thin.

Lamellae adnexed, white at first, becoming pinkish, ventricose, edges concolorous.

Stipe about 2 mm thick, violaceous, vivid-blue, to indigo-blue, not paling, glabrous, base white-tomentose, apex black-punctate, stuffed then hollow.

Spores 10-11.5 x 7-7.5 μ (K & R), 11-13 x 7-8 (9) μ (Lundell & Smith No. 1132). Basidia 32-38 x 9-11 μ , 2-4-spored. Pleurocystidia and cheilocystidia none. Subhymenium a narrow zone of small cells. Gill trama subparallel, hyphae 6-10 μ broad. Pileus trama radial. Cuticle of repent hyphae, with scattered scales composed of pale fuscous pilocystidia. Clamp connections and lactifers none. (K & R) report clamps at the base of the basidia and on the hyphae.)

The description of macroscopic characters above is from Fries and Lange; of microscopic characters from Lundell & Smith collection No. 1132, with notations from other authors.

LEPTONIA PLACIDA (Fr.) ^{Kummer,} ~~Fr.~~ sensu Konrad & Maublanc
Collection No. 1132, by Lundell & H. Smith, near Upsala, Sweden,
Sept. 10, 1938.

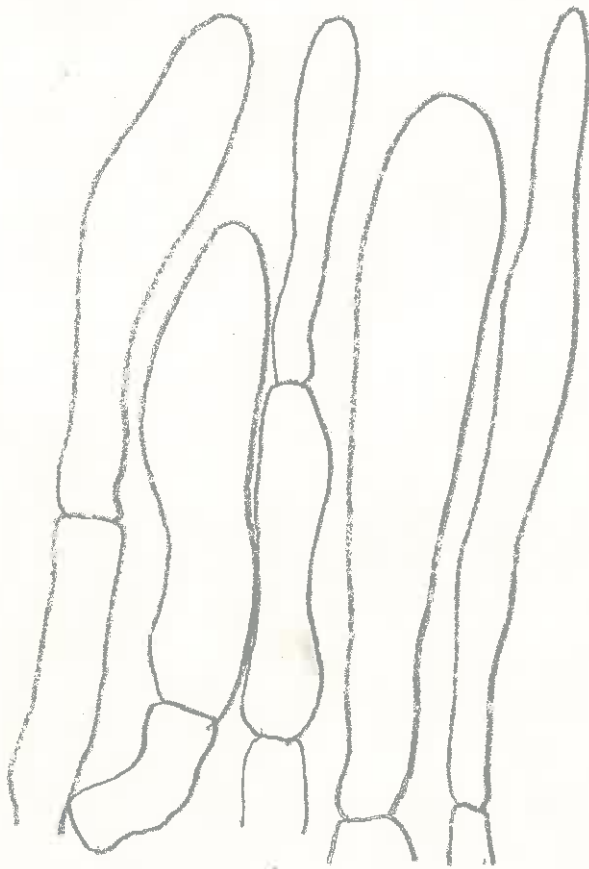
Spores 11-13 x 7-8 (9) μ , 6-sided. Basidia 32-38 x
9-11 μ , 2-4-spored. Pleurocystidia and cheilocystidia none.
Subhymenium a narrow zone of small cells. Gill trama sub-
parallel, hyphae 6-10 μ broad. Pileus trama radial. Cuticle
repent, with scattered scales composed of tufts of pale fuscous
pilocystidia. Clamps and lactifers none.

Lundell's notes say it agrees excellently with K. & M.,
Icon. sel. fung., pl. 132:2., but Fries species is different.

Leptonia placida (Fr.) ^{Kummer} ~~Fr.~~ sensu

Konrad + Maublanc

Stockholm collection No. 1132



Scale - *filocystidia* - $\times 1000$

Not Entoloma

* ENTOLOMA PLUMBEUM Earle

New York Bot. Garden 3:298. 1905

The type, studied April 20, 1962, has smooth, ellipsoid spores $5.5-7 \times 3.5-4 \mu$, and is not an Entoloma. The description gives the spores as pale-salmon-colored. It may be a Lepista, near L. tarda (Pk.) Murr.